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OBSERVATIONS ON SELECT SUBJECTS IN SURGERY.

BY MR. SIMMONS.

(Continued from pp. 97—103.)

ON STEATOMA.

AS the end of all arrangement is utility, the practical advantage of classifying tumours, whose treatment is similar, is not very obvious. Conversely, it is much more valuable to know that certain disorders, though diversified in their external character, are in their nature so analagous, as to yield to a like mode of treatment. Of this sort is the steatoma, a disease akin to several others, which, in their advanced stage, can only be effectually removed by the knife.

This species of tumour originates from the extravasation of fluids into the cellular membrane, which, instead of being absorbed, or converted into pus, receive an imperfect organization by very slow degrees. The growth of the steatoma, though slow, is progressive, until, in some cases, it has arrived to a large size, much larger than what is here recorded. From its low sensibility, it is not apt to inflame, and is rather inconvenient from its bulk than painful. It is confined to no particular situation, though it has happened to me to meet with it most frequently on the back and thighs.

In the early stage of the steatoma, it may be worth while to try the effect of topical remedies, such as stimulants by friction and pressure, in the hope to destroy its feeble vital powers, and render it fit for absorption. Where these and electricity fail, excision is fully warranted.

In the extirpation of a steatoma of a moderate size, a longitudinal incision will commonly give sufficient room to the operator; but, when it is of a large magnitude, it will

will be better to rescind a portion of the integument, or it will pucker by its super-abundance, and hinder an early union. Agreeably to this opinion, I acted in the following case.

A gentleman, near sixty years of age, had a large steatoma, which had sprung from a blow, and increased slowly for thirty years. It was situated upon his neck and shoulders, and occupied a space from the occiput down to the lower angles of the scapulæ, and, anteriorly, was descending towards the clavicle on each side. Alarmed by this, he determined upon its removal, although it was neither inflamed nor painful, and only troublesome to him by its unwieldy size. I began the operation by making two corresponding incisions the whole length of the tumour, so as to include an oval portion of the skin, which was left adhering to it, and then I dissected out the whole, which took up about ten minutes. The arteries divided in the operation, were not secured until now, for I wished him to lose as much blood as was likely to hinder much subsequent inflammation; and he lost, I believe, about twenty ounces. The hæmorrhage however would have been more considerable, but for the activity of my assistants. Before the operation, I had conceived the idea of at once obliterating this immense cavity, by an immediate union between the upper and under surfaces, whence the tumour had been separated; accordingly, the lips of the wound were held together by about thirty stitches; long broad stripes of adhesive plaster were applied in every direction; and over these, bolsters of tow were supported by a moderately tight bandage.

At the first dressing, which took place on the third day, I had every reason to believe that union by the first intention was throughout complete; and in a week he was able to leave the house.

The tumour weighed six pounds two ounces avoirdupois; and the engraving will shew, had the true lobulated appearance of the steatoma.

The only thing remarkable, to which I hope for the attention of the reader in this case, is the method of dressing that was here adopted with full success, and which, upon further experience in cases nearly similar, I can recommend to the adoption of others.

Many years ago, I removed a steatoma that hung pendulous, near a foot in length, from the left labium pudendi, in a young unmarried lady. She was insane at the time, and it is not improbable but her delicacy concerning it,

it, had proved the cause of that awful visitation; at least, soon after its extirpation, her senses were restored to her; and continued perfect when I last heard of her, at the end of several years. The wound united by the first intention in this case also.

Sarco-Epiplocele.

A middle-aged man, of sober and industrious habits, requested me to look at a swelling on the left side of his scrotum. On examination, it appeared to be an enlargement of the testicle, together with an induration in the epididymis, and an unusual fullness in the cord. The account which he gave of himself, was, that a few months before, he first perceived a small swelling about as big as a walnut, and being told that it was a rupture, himself and others had made strong and frequent ineffectual attempts to reduce it; and these failing, a truss, the pad of which consisted of a solid piece of wood, was placed over the swelling to waste it away, or at least to prevent any further descent of it into the scrotum. At this time, the testicle itself was as large as a middle-sized orange, equal on its surface, and free from pain, even after moderate handling. Hopes of its dispersion being entertained, he was advised to try discutient remedies; and in the use of these, he persisted for some time, but without any advantage. Indeed, the swelling of the testicle augmented very rapidly a short time previously to the operation, which, therefore, at his own request, I performed upon him on the 30th of March, 1804. In cutting down to secure the spermatic cord, a portion of omentum that lay anterior to it, immediately protruded; on turning up the omentum, the cord appeared quite sound a little after its exit from the testicle; here, therefore, the ligature was applied round the whole cord at once, which was then divided just below. After this, he felt very little pain in the excision of the testicle. The state of the omentum was next enquired into; when the supposed indurated epididymis, which indeed was entirely wanting, turned out to be a diseased portion of omentum, a large quantity of which had insinuated itself into the tunica vaginalis, but did not adhere to the testis. As none of it could be returned, it was removed close to the ring with a pair of scissars; however, without the ensuing of any hemorrhage, so that no ligature was required upon any of its vessels. The lips of the wound were held in contact by

by the interrupted suture; and the customary dressings applied.

The morning after the operation, the pulse being hard and full, he lost sixteen ounces of blood from the arm; and as it was sizy, and the pulse would bear it, the bleeding was repeated in the evening to the quantity of twelve ounces. On the following morning, his bowels were copiously emptied by a saline purgative. On the third day, the tension and redness in the course of the cord were pretty considerable; and as his pulse did not indicate general bleeding, fifteen leeches were laid upon the part; and, early the next morning, the purgative was repeated. On the fifth day, suppuration had commenced; and he began with the bark. And, on the eleventh, the ligature came away; after which the discharge gradually subsided, and, in a month, the wound was completely healed.

This case proved more complicated in the treatment of it, than was at first imagined. On the supposition of an intestinal hernia, he was enjoined to keep his bed for several days prior to the performance of the operation, and, by his own account, there was reason to believe that something that had prolapsed into the scrotum, had re-ascended into the abdomen, during his confinement. But this could not have been the omentum; because, after it had become indurated, it could not have quitted the tunica vaginalis. It was most likely therefore a turn of intestine, that had slipped down occasionally behind the omentum.

The morbid alteration which the testicle itself had undergone, was evidently of a scrofulous nature; hence some may be disposed to carp at the employment of the term *sarcocele*, as being contrary to its usual technical acceptation. But, I shall not dispute about a name. The inner structure of the testicle was evidently *carnous*; yet, so elastic on pressure, as, a few days before the operation, to mislead us to the introduction of the trocar, conjecturing that there might be water, in order to ascertain the real state of the testicle; however, no water was evacuated, nor was he at all prejudiced by the attempt.

He first perceived the descent of this testicle in his thirty-seventh year; and looking upon it as a defect, through mistaken and false delicacy, by endeavouring to conceal it, he unfortunately fell into improper hands. Much of the mischief that ensued may doubtless be ascribed to the rude violence with which it was treated; at least, the patient himself always declared, even while I was trying to preserve it, that it had been so ill-used that nothing could

save

Scroflulous Testis.

Fig. 1.

Diseased portion of Omentum.

Fig. 2.

Printed for Richard Phillips *New Bridge St. 1805*

save it; and, consistently with this declaration, he solicited its removal from the first.

Such instances as this are, I apprehend, not very common, though the works of practical writers are not without records of the injury sustained by mistaking a testicle, while detained in the groin, for a hernia or bubo. Certainly, in the present case, the descent was unusually late; and it might be amusing, if not profitable, to enquire a little into the cause of so singular a phenomenon; for, as far I can recollect, no physiologist has yet investigated the subject with much precision. We have reason to believe, that the peculiar mode of existence, and functions assigned to every organ, have an intimate relation to its internal structure; and that if by any accident the organization of a part should be materially altered, a reciprocal alteration of function will necessarily ensue. Agreeably to this position, the detention of the testicle within the abdomen, for so many years beyond the usual time of the descent of it into the scrotum, may be explained. I have before observed, that the epididymis was wanting; nor is that all, for the vas deferens, which should have sprung from the upper extremity, was inserted into the very bottom of the testis, and from this point took a direction round the body of the gland to the upper extremity, and from thence passed forward through the ring with the rest of the cord. To this *lusus naturæ* I should be disposed to ascribe the irregularity of the descent in this case; not, however, that the deviation was such as to hinder secretion, or obstruct the office of the excretory duct.

To represent the circumstances just mentioned, as well as the appearances assumed by scrofula in the testicle, when laid open by a longitudinal incision, I have caused a coloured drawing to be made. And also a second, to depict the indurated portion of omentum: in both, the suffused redness was probably owing to the trocar, which must have passed through the omentum into the body of the testicle.

Scirrhus Testicle.

To elucidate the history, or convey in words a distinct idea of the alteration of structure produced in a glandular part by scirrhus and cancer, may justly be reckoned a vain attempt; for, as far as language is descriptive of morbid appearances, the subject, in my opinion, is already exhausted. Perhaps something may be done by the art of painting, but even of this my expectations are but

moderate.

moderate. Some time anterior to the above case of scrofulous testis, I had come to the resolution to procure a series of coloured drawings relative to scirrhus and cancer, and I have introduced that here, as introductory to the two following, which are all I at present possess. In the first is shewn the morbid appearance exhibited by scirrhus in a testicle, which was extirpated from a middle-aged man, soon after the former operation. This disease had existed for seven years, yet, until a few months before the excision was performed, the testicle was but inconsiderably enlarged, though to the touch it presented a stony hardness, was craggy, and painful after handling. Subsequently the pain increased, with exacerbations at irregular intervals, and the enlargement proceeded very rapidly. Still, as the cord was apparently free from disease, I proposed the operation to him without delay, to which he readily submitted; and the wound was healed within a reasonable time. But when the wound was nearly closed, a severe pain fixed in the right hip, and a tensive opake swelling pervaded the thigh and leg on the same side; these however yielded to leeching, a blister over the pained part, and fomentations and spirituous embrocations generally to the extremity; and, lastly, as the tensiveness abated, a moderately tight roller was duly applied.

Open Cancer.

The second drawing exhibits a specimen of open cancer, which occurred in an elderly woman who had borne many children The disease was in the state represented when she first offered at the Infirmary; the axillary glands were much enlarged, and the whole arm was tumefied. In a former instance of ulcerated cancer of the mamma, the tumefaction began in the hand, and ascended by degrees up the arm to the shoulder; and the cool or tensive state of the skin of the hand over the knuckles, very certainly indicated the calm, or irritated state of the breast itself. In the present case, however, the direction of the swelling was reversed, and it descended from the shoulder down to the hand, without any distinguishing affection of the skin over the knuckles

[To be continued.]

Open Cancer.

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To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I HAVE taken the liberty to transmit you a Case of Fractured Skull, which strikes me as somewhat singular, from so great an extent of injury not requiring the operation of the trepan, which if, in your judgments, you may deem worthy of a place in your monthly publication, I will thank you to insert it. I have not the vanity to suppose, that to the greater part of your readers it can afford the least information; but as I feel myself that I have derived considerable instruction from the case, I conceive it probable that some of the younger branches of the profession may be led, under similar circumstances, to withhold the use of the instruments, and spare their patients a great deal of pain and a tedious recovery. The case is as follows: A soldier, without the least provocation, struck his comrade who was asleep, and lying upon a form rather in liquor, with a flat piece of iron, about two feet and a half in length, and about six pounds weight, upon the parietal bone, two inches and a half in a perpendicular direction above the extreme edge of the external ear; the scalp was divided nearly three inches longitudinally, and the fracture continued the whole length of the wound, together with the depression of the upper edge of the bone, so that the inferior edge could be very distinctly felt, as well as a small piece of the upper table of the skull, loosely detached, but adhering firmly to the scalp. The blow had divided the continuation of the temporal artery; and as it was some length of time before his situation was discovered, when I went down to him, I found he had lost full two pints of blood. After taking up the artery, and finding the man perfectly sensible, I determined not to use the trephine until the symptoms warranted it; and closing the wound by two stitches, left him for the night. In the morning (being December 4th) I was much pleased to see him entirely free from every appearance of coma, delirium, or even fever; I gave him a saline purge, which operated three or four times copiously. In the evening I repeated my visit; I thought his pulse a little too full, although he did not complain of any pain. I took from his arm sixteen ounces of blood, and he expressed himself "lighter" for its loss. I kept him on very low

 diet,

diet, and continued seeing him three or four times during the day; no alarming symptoms occurred. On the fifth day from the accident his pulse felt stronger than I wished it, and I was very particular in my inquiries respecting his feelings; but he assured me he felt as well as usual: however, I considered it better, if possible, to prevent the approach of inflammation, and I bled him to sixteen ounces, as before, and no return of fulness existed afterwards. During the whole time of his illness, his appetite continued very good, and his bowels regular; and as no fever or any other bad symptom was induced, I conceived medicines to be useless. On the 21st of December, I reported him convalescent. The wound was healed in part by the second intention, and in part by granulations, and had every favourable appearance throughout; had I been attentive in bringing the edges together the first evening, I have no doubt but the wound would have healed by the first intention; but it was very late, and I thought the operation was inevitable, which made me neglect it. The patient is now perfectly recovered, and except a little debility from the loss of blood, low diet, &c. &c. is as well as if no accident had happened to him. Had I performed the operation immediately, which I think the nature and extent of the injury fully warranted, I certainly might have produced a greater danger, and probably bad consequences, which the event of the case has clearly proved did not exist in any material degree without it.

I am, &c.

Farnham, Surry, Jan. 2, 1804.

B. G. SNOW.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IT is a source of satisfaction to observe, that whilst a number of your Correspondents are tossed on the stormy ocean of controversy, there are others pursuing the pleasurable course of calm investigation; and through the medium of your valuable publication, communicating useful and salutary information; among which, that of Dr. Bardsley requires particular attention; his narration of,

of, and reflections on, the melanchly catastrophe related in No. 72, can but engage the feelings of every man of humanity, and excite the rising wish, that some remedy may be discovered that will remove so dreadful a disorder as that of rabies canina.

As the Doctor, in p. 163, expresses a hope that there is yet a remedy for this disorder, and seems disposed to try its effects, should it ever fall again to his lot to witness another such case; and that that remedy he judges to be arsenic: I have, to encourage the practice, sent you the following recipe; which I have for some time had in my possession. The following is a literal transcription, and is entitled,

A Receipt for the Bite of a Mad Dog.

Take the leaves of rue, pick them from the stalk, bruise them; six ounces of garlick, picked from the stalk, and bruise them likewise; Venice treacle, or mithridate, and the scrapings of pewter, of each four ounces.

Boil all the above ingredients over a slow fire, in two quarts of strong ale, till one pint be consumed; then keep it in a bottle, close stopt up, and give thereof to a man, or woman, (warm it first) nine spoons full, seven mornings fasting together.

To a dog six spoons full.

This, the author believes, will not, by God's blessing, fail, if it be given within nine days after the biting of a dog.—Apply some of the ingredients from which the liquor was strained to the bitten place.

This recipe was taken out of Colthorpe Church, in Lincolnshire, in 1766, the whole town being bitten by a mad dog; all that took this medicine did well, the rest that did not take it, died. Thus far the copy.

The quantity of rue is not mentioned, nor do I suppose it a matter of importance, the chief ingredient is most probably the pewter, and that from the quantity of arsenic which enters its composition. How far the character given of it may be depended on, cannot, perhaps, at this distance of time, be ascertained. Yet, I hope that neither Dr. B. nor yourselves, will think the communication altogether useless.

I am, &c.

Chatham, Feb. 14, 1805. THOMAS HOPE.

To

To the Editors of the Medical and Physical Journal.

Gentlemen,

Dr. HEBERDEN, in his elegant Epitome morborum puerilium, asks the following question: "Cum vero cernimus lac uberibus matris a Deo esse præparatum, cur non ars nostra primos faciat cibos lacti quam simillimos?" By this question, the Doctor probably intended an imitation of the degree of heat as well as of the nature of the food. But as no caution is given in his chapter De victu puerorum against heating food too hot, I am induced to submit a few words on this subject to the consideration of your readers. As the secretions of the human body are none of them hotter than the human blood, it is evident that nothing should go hotter than 98 degrees, of Fahrenheit's thermometer, into the stomach of an infant. But as this heat would be considered as cold by most nurses, who are accustomed to drink scalding hot tea, and who are foolish enough to think that there is no nourishment in any food which is not heated to nearly that degree, can it be wondered at, that so many infants have, within the first month, their mouths, throats, and stomachs, scalded into a thrush?

For these last eight or nine years, I have believed that the greatest numbers of aphtha which take place during the first month of infants are ulcerations from scalding hot food. The directions which I have given to mothers are, never to allow their nurse to feed the child without their first examining the warmth of the food, especially during the night, when the nurse, between sleeping and waking, is usually apt to overheat the food.

By attention to this precaution, my own children, and many others in this town, have escaped the thrush. That food impregnated with copper by standing too long in a silver vessel, or by containing any other saline or vegetable acrid, may also occasion aphtha, is not my intention to deny. And I am aware that Dr. Underwood has enumerated the too great heat of the food among the causes which may excite aphtha, though he has not limited the degree of heat at which an infant's food ought to be warmed.

I am, &c.

Yarmouth, Feb. 13, 1805. T. GIRDLESTONE.

To

To the Editors of the Medical and Physical Journal.

Gentlemen,

EVERY practitioner must be sensible of the utility of local blood-letting in several inflammatory affections, which cannot with safety be performed but by leeches. It therefore gave me great pleasure to find some of your correspondents, in the Medical and Physical Journal, making their preservation and management a subject of inquiry. Mr. Wilkinson has pretty fully explained what relates to their preservation, management and application: we may, however, expect a good deal of information, with respect to their natural history, from some of your correspondents who reside upon the spot where the leeches in general use are obtained, which is in some part of Norfolk. I recollect, that about eight or nine years ago, leeches were very plenty in Aberdeen; people came from Musselburgh and Edinburgh, hawking them through the apothecaries shops here. They were sold from nine to ten shillings the hundred. They generally had several thousands of them, which they carried in a small cask, or firkin, without any water. They washed them, however, with pure spring water twice every day. When I looked in among them, they appeared all in motion, and were very clean, and free from those slimy skins in the form of small rings, which leeches generally cast off every other day. Their continual motion facilitates this, and helps to keep them clean. From their healthy state with this treatment, I should think that leeches ought to be kept in a large capacious vessel, and when they are cleaned once every day, should have but a small quantity of water round them.

I once bought a hundred leeches from a hawker, which almost all died soon after. When I first got them, they had not that vivacity and strength of motion which sound and healthy leeches have; they were soft and flabby, and did not recoil into a firm knot (when taken up in the hand and pressed a little), which they generally do when in perfect health.

I gave them fresh water every day, and freed them from all slime and filth, yet the water was bloody every morning, and some of them dead. Those that died were quite flabby, their mouths swelled and white, and sometimes several hard knots in different parts of their bodies; but most frequently towards their neck. Upon dissection, these

these tumours appeared to be owing to black coagulated blood. When the mortality was so great among them, I added a little lump sugar to the water; and, after that, I tried a little peat turf; but nothing that I could think of was of any service in restoring them to health. I found that putting them in the warm rays of the sun gave them a little fresh vigour. As leeches at that time were easy to be had, I was not very anxious of trying experiments with them. It is of the utmost importance to have leeches strong and healthy; the first that are caught, or what are called spring leeches (I am told) are generally stronger than those that are caught in the summer. But very frequently good leeches, after keeping them for some time in quantities together, will turn sickly and die. When this mortality is beginning, the best prophylactic is to separate them into small parties. The first sign of an approaching mortality among leeches, is the water turning bloody: when this appears, they should be instantly separated, kept in small numbers, and supplied regularly once every day with fresh water. From my own observations, I have found that pure spring water, which has run in a brook where it could not be impregnated with metalic substances, is best for keeping them. The water of the upper course of the city of Aberdeen, is much better for preserving leeches than the lower course, where the water is immediately conveyed from the spring; the former is softer, owing to its being exposed to the action of the atmosphere, which deprives it in some degree of its fixed air. Leeches are likewise naturally to be found in brooks where the same water runs, which is a sign of its being more agreeable to them.

I believe, that where leeches are kept in quantities together, the water should be renewed daily, and all the slime and filth well washed away from them; but where a few are only kept in a phial, it is not so absolutely necessary. I have kept six dozen of them together, and not changed the water more than once in three days during the cold weather of winter: but, in summer, it is necessary that they should have fresh water oftener. I have, during cold weather, added water to them almost at the freezing point, without doing them any mischief.

It is also necessary that they should be kept in a well aired place, free from smoke and the effluvia of drugs. An apothecary's shop is one of the worst places for keeping leeches. Leeches are peculiarly delicate, and a very little injures them. Noise of every kind proves hurtful to them

them, but especially a thunder storm; they are always unwell after it, and very commonly a mortality commences soon after. An apothecary, when he intends to handle leeches, ought always to have his hands clean washed; for the smallest particle of some drugs adhering to the hands, has been known to occasion a mortality amongst them. Motherby, in his Medical Dictionary, observes, that Themison is the first who takes notice of leeches, and refers the curious to the following writers on this subject, viz. Aldrovandus, Gesner, Botallus, Sebezius, Heurnius, Cransius, Schroder, and Stahl. He says, those should be chosen whose backs are striped and bellies spotted, and which are taken from running waters that are clear, and have a sandy bed. He orders the water in which they are kept to be renewed every three or four days at the latest, and a little sugar may be added to the water in which they are kept. The quantity of blood which leeches draw, is always in proportion to their size. A large leech generally draws one ounce of blood; but, by applying cloths wrung out of warm water to the orifice, and encouraging it to bleed, double that quantity may be obtained. But sometimes the orifice will bleed a very great quantity when the wound is on a vascular part. I have been called several times to stop the bleeding of a leech, which I could only effect by a good deal of pressure. The wound is of a triangular shape, and of a lacerated nature; an inflammation attends it for several days, while a small black scab forms upon the orifice, which comes off in eight or nine days. Salt is the article most generally used for making leeches vomit the blood they have sucked; but there is another method of emptying them of blood, which I have seen practised, and that is by drawing them through the fingers, and thereby forcing the blood out. This is called striping leeches; a method which, I believe, is used by the catchers of them at some particular seasons. When a leech is full of blood, all those rings upon their surface are perfectly stretched, and they resemble a cylinder filled with blood. A large leech will sometimes suck so long, and be so distended, that in undergoing the vomiting process it will generally expire; therefore a large leech should never be allowed to continue to suck to that degree, as to exhaust her strength by over distention.

There is a species of leech to be found near Aberdeen, of a large size, and yellow colour. Their backs are of a brownish yellow, and their bellies of a lighter yellow; they are only to be met with in the summer; they are known by the

the name of horse leeches; people are very much afraid of them when they are barefooted in brooks, where they are to be seen. They imagine, that were they to fix upon them, they would suck all their blood out before they could be removed. These notions have prevented their being applied to any use. One time, when there was a scarcity of leeches, a man brought me half a dozen in a phial, and wished me to apply them to his leg. I was glad of this opportunity of making trial of them; but after using every method I was acquainted with, I could not succeed in making them bite. I even removed part of the cuticle, and tried them upon it; but after several attempts they would not fasten. I then put them into a closet, and did not look at them for several months; I found five of them living, but was much surprized to find one of them gone; because the mouth of the phial was properly secured with a bit of linen rag. In about six weeks after, I missed another; some time afterwards, the third was gone, and then the fourth; which raised my curiosity, and caused me to look rather oftener. I perceived one day, that the two which remained were connected together; one of them appeared dead, and the other living; I looked frequently to see what this phænomenon would end in. The dead leech gradually disappeared, and there remained only one. He continued to live for some time, but appeared to lose his strength gradually, and to turn smaller; at last he died. During the whole time I kept them, which was rather more than a twelvemonth, I only renewed the water twice or three times; yet the water continued pure, sparkling, and free from smell—a small quantity of greenish matter gathered round the sides of the phial. Although my first attempt to make these animals bite proved unsuccessful; yet, as they differ in nothing from those which we get from England but the colour, I am not without hope, but by repeated trials, I may succeed in making them bite, could the prejudices of the people be removed. When they can be had so easily, and appear to be so hardy, could they be employed as a substitute for the other kind, it would not only save a great expence, but also afford us a resource upon all occasions.

When the season arrives that they make their appearance, I shall send a few of them to Mr. Wilkinson for the purpose of making experiments with them.

While writing the above, Feb. 12, 1805, I was sent for to a patient at a place called King's Wells, four miles from Aberdeen,

Aberdeen, affected with Ascites. They called her Isabel Bisset, an unmarried woman, aged 24. The swelling was so very large that she could not turn on her back, but always lay on her side. Her strength appeared to be almost exhausted, and her pulse was scarcely perceivable: although she was at times very sick and faintish, yet she had never fainted altogether. I have seen a good many cases of ascites, but never any accompanied with such an extraordinary abdominal swelling. It is nearly two years since the swelling was first perceived: she complained then of pain in her right side, accompanied with irregular and copious menstruation. Six months ago, she was seized with vomiting of her food and drink, which continued for three months; her belly increased in size every day; her menses disappeared; her thirst increased, and her urine turned more scanty. She has a stool every day, but is incapable of turning herself in bed; and, when she attempts it, her breath goes almost entirely away; she cannot bear to lie upon her back for one minute. Finding it impossible, in her present condition, to be sent to the hospital, I thought it might be a means of alleviating her distress, to perform the operation of paracentesis. With this intention, I went next day with an assistant, and carried along with me a bandage for compressing the abdomen, somewhat resembling Dr. Monro's; but, instead of leather, it was made of strong unbleached linen, lined with flannel, and strong straps for tying. Her circumference, before I put on the bandage, measured four feet and a half. I marked the place where I intended to introduce the trocar, and cut an opening in the bandage opposite it, which could be opened or shut at pleasure, as it was fastened with pins. During the operation, she was not in the least inclined to faint, but kept her spirits very well, and desired the assistants not to withdraw the pressure, otherwise she could not breath. I drew off from her thirteen Scots pints of water, of a tea-green colour, which is equal to forty-eight English pints. Eight days after she was continuing easier, and feels herself very light, but has not strength to sit up, or much appetite for food.

I am, &c.

ANDREW FERGUSON.

SOME

Some Remarks on the Origin and Progress of the malignant Yellow Fever, *as it appeared in the Village of Catskill, State of New York, during the Summer and Autumn of* 1803, *in a Letter from* Dr. Benjamin W. Dwight *to* Dr. Eneas Monson, *of New-Haven, Connecticut.*

(From the Medical Repository of New-York.)

As much pains have been taken, in various newspaper publications, to persuade the people of this country that the yellow fever is never of domestic origin, but an imported disease, I have been induced to state to you some facts which appear to me to support the contrary opinion. It was originally my intention to state, generally, the existence and progress of the disease in this place, during the summer and autumn of the present year, and the manner in which I conceived it to originate; but as I have been informed that some gentlemen, who discover the nature of yellow fever by intuition, and not by observation and reasoning, have doubted the existence of the disease in this place, or have determined, if it did exist, that it must have been imported, I have thought it advisable to state *particularly* some of the first cases which occurred, that every one may judge for himself whether it was yellow fever or not.

The attending physicians were of one opinion as to the nature and origin of the disease. If they were mistaken in their opinions, then the following observations will avail nothing as to the point in debate. If their opinions were correct, then I flatter myself that it will unanswerably appear, from the following observations, that the malignant yellow fever may be, and has been generated here. That its origin is always *domestic*, I am far from believing. That it is sometimes *contagious*, there appears to be good evidence. An instance or two of its contagious nature I could produce. That it was contagious in any instance here, during the present season, there are no good grounds for believing.

The question is very important to be settled. If the disease be imported, the strictest quarantine laws should be made, that this fiend may be prevented from again landing on our shores, and brandishing the sword of destruction over our heads. If it be generated among ourselves, it is a duty incumbent on the legislature to compel people every where to remove all filth, to root out, so far as is practicable,

practicable, all the causes of vegetable and animal putrefaction, and to cherish cleanliness as a cardinal virtue.

If ever the question is decided, it must be by facts. One important fact is of more avail, and will have more weight with candid men, than all the hypotheses even of the learned Haygarth, or any other the most ingenious physician or philosopher that ever lived. To facts then be the appeal.

Previously to entering upon the subject, I shall make some observations upon the local situation and circumstances of Catskill, and also upon the weather of the summer and autumn. I regret that these will not be more complete. Having resided in the place but a few months, I have not been able to possess myself of all the facts which it might be interesting to know. For a number of them, it is with pleasure that I acknowledge myself indebted to my worthy and ingenious friend, Dr. Croswell.

The village of Catskill, or, as it is usually called in the neighbourhood, Catskill Landing, is situated along the Catskill Creek. This creek empties into the Hudson about six miles below the city of Hudson, and one hundred and twenty-five above New York. Catskill Creek is formed by the junction of the Kaaters'-Kill and the Kaat's-Kill,* two streams of moderate size; the former of which, and not the latter, as is erroneously stated in the Medical Repository, Hex. I. vol. i. p. 310, arises from a pond or lake in the Blue Mountain, and, pursuing a serpentine course, empties its waters into the Kaats' Kill, about three miles from the mouth of Catskill Creek. The latter, if I am correctly informed, arises from a swamp called by the Dutch Eckeson Fly, in the town of Middleburgh, in Scoharie county, and proceeding also in a serpentine direction through Bristol, Rensellaerville, Freehold, Canton, and a part of Catskill, unites with the Kaaters' Kill. The Kaats'-Kill is the largest stream. Both have rapid currents, and in many places rocky bottoms. In both are a number of falls of considerable size and importance; some of which are in no small degree interesting and remarkable.

The creek has a bar of sand at the mouth, over which in common tides, there is about nine feet of water, This bar is the commencement of a small island, situated in the Hudson, a little north-east of the mouth of the creek. Were a wharf erected, extending from the main land, i.e. from

* This is often written Catskill.

from Catskill Point, to and along this island, any ship which could pass the mouth of the Hudson might come to Catskill with entire ease and safety, and be hauled along side the wharfs. Whenever this is done, the growth of Catskill will probably be rapid, as few towns on the Hudson are so advantageously situated for commanding the trade of a great portion of the western country.

The creek, tracing it from its mouth, proceeds in a north-western direction about three-fourths of a mile. It then takes a turn nearly west, and proceeds in this direction thirty or forty rods. After this it takes a second turn nearly north, and proceeds in that direction about three-fourths of a mile. To trace it further is of no consequence to the present design. It is navigable for vessels drawing twelve feet of water about a mile from its mouth, if they can be got over the above-mentioned bar. About a mile from its mouth there is another bar, but sloops of 100 tons may easily pass sixty or eighty rods further. The tide rises, at common tides, from four to six feet, as far up as Van Vechten's mills, about two and a half or three miles from its mouth. About one and a quarter or half a mile from its mouth there are rocks and small rapids which obstruct navigation.

The creek is of different widths in different places; it is generally from twenty to forty rods wide from its mouth to that place where the rocks and rapids commence. After this it is narrower. The current is brisk. There are no low swampy places along its banks, where the water stagnates; the banks being generally abrupt, and considerably higher than the surface of the water.

The water of the creek is soft, and makes a good lather with soap, and is generally used for washing by the inhabitants.

Including dwelling houses of all descriptions, there are more than a hundred in the village, and also a considerable number of stores. These, excepting about six or eight, are situated on the east side of the creek, and principally along one street. This street commences at the bank of the Hudson, and runs about a hundred rods in a north-west direction, near to the creek. Where the creek takes the first turn, as above-mentioned, the street is changed from a north-west course to one near north, and continues in this direction about half a mile. This part of the street is, *generally*, from ten to thirty rods distant from the creek; in some places the distance may be forty rods. After this, the road takes a second turn nearly west, till it reaches

reaches the bank of the creek, and then pursuing a general north-western *direction,* is continued on the great western turnpike, leading to the Susquehannah river. Where the creek makes the first bend, there is also a short street running nearly parallel to it. On this street stand several houses, and between the houses and the creek a few stores. The ground on which these stores stand, is partly or wholly made ground. At this bend of the creek, a kind of bason is formed, and several families live, as it were, on its brim; or, in other words, some of the houses are situated upon the edge of the bank, or directly down it, one end being at the top, the other end at the bottom. Let this place be remembered, for here the sickness commenced, and around here it made all its ravages. There are some other cross lanes where houses and stores are situated. A number stand near the creek, on no regular street, and a few scattering ones are to be found elsewhere.

That space, or portion of ground, between the east side of the main street and the creek is low, and nearly level, but there is a gradual descent sufficient for conducting off all water to the creek. The eastern side of the street, throughout its whole extent, is bounded by the foot of a hill of some height. This hill has a pretty steep ascent; its height is generally, I should suppose, from fifty to a hundred feet. The northern part of the village is likewise bounded by hills of about the same height. On the western side of the creek, for the space of nearly a mile, the hills are high, and approach close to its edge, there being little or no flat. Above this, the ascent is small. The present settlement is almost entirely hemmed in by hills. The circulation of the air in the summer and autumn is, of course, often languid, and the heat and sultriness of the weather is unpleasant and relaxing.

The soil, both on the hills and in the plains, is, generally, a very fine clay. There are some small patches of loam and sand chiefly on the hills. When a rain falls, the water, instead of settling in the ground, descends in a considerable measure into the flat, and from thence into the creek, or what is not unfrequently the case, settles in the gutters and sunken places in the streets and elsewhere. Here it continues in hot weather till it is evaporated by the heat of the sun. In the course of a few days it becomes covered with a green scum, which is putrid and highly offensive, so as not unfrequently to excite disagreeable sensations in the head and stomach. In long continued hot weather, preceded by considerable rains, and

aided by other local causes, some severe cases of sickness have, in several instances, been in this way produced. All this might have been prevented by a little pains-taking. By making a sufficient number of sluices, and keeping them free from obstructions, the water might easily be conducted into the creek, and in its course be very advantageously made to cleanse all sewers and drains for conducting off filth.

The well-water in Catskill, and generally in the neighbouring country, is very indifferent. Most of it, as far as my observation has extended, is hard, and abounds in hot weather with animalcules, in shape resembling tad-poles, and not unfrequently with small worms. After standing a little time, it deposits a clayey sediment. By drawing out the water freely, it may be much improved in softness and purity. Possibly all these evils might be remedied, by placing a layer of sand on the outside of the stones, a foot or two in thickness, and extending from the bottom to the top of the well; and another layer at the bottom of the well. This I suggest merely for experiment. I know not that the trial was ever made.

A free use of the water, as drink, is very apt to induce troublesome diarrhœa, especially with such persons as have resided here but a short time.

The people of Catskill live very much crowded together, most of the houses containing two, three, four, or more families.

The number of inhabitants in the village, or in the town of Catskill, which includes *the landing*, Loonenburgh, and several small settlements, cannot be ascertained. The late census, it is said, was very inaccurately taken.

This place is usually as healthy as most other places situated along the Hudson. Albany, Loonenburgh, and Hudson are probably quite as unhealthy, if not more so. Some cases of bilious remitting fever occur almost every season, but they are not usually more frequent, nor attended with more severe symptoms, than the same disease is elsewhere. In a few instances there have been cases of malignant fever, but never any considerable number previous to this season. In most instances they have clearly been owing to local causes, and have generally been confined to those places where such causes operated in an especial manner. Till the present year, the greatest number of cases have occurred in places considerably remote from the wharfs. The reason is obvious. In addition to the stagnant waters in the gutters, &c. as above-mentioned, not more than two years ago a slaughter-house was opened

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near the middle of the main street, a little east from the road. Here a large number of sheep and neat cattle were slaughtered during the summer season. All the offals were thrown into the yard, and lay there from season to season. After every rain, the water which proceeded from this yard ran into the street, and there became either partially or wholly stagnant. In the neighbourhood of this sink of filth and poison it has, in several instances, been very sickly. Some cases highly malignant have, at times, occurred. In one small house, in particular, so situated as to take more of the stench than any other, Dr. Croswell informs me, that the number of cases of severe sickness, during the existence of this evil, among the several families who have resided in it, have been very remarkable. He could generally determine before-hand, from the weather, and the state of the slaughter yard, and the sewer leading from it, whether these families were to be visited with sickness or not. Some other causes of a similar nature have, at times, existed in other parts of the village, and produced sickness. In those places free from such nuisances, it has, in general, been very healthy. During the present season these evils have ceased to operate. The weather also, from being very dry since about the middle of August, has been unfavourable to the putrefaction of animal and vegetable matter. The consequence has been, that every part of the village, except the one above-mentioned, has been very healthy. Could the town of Catskill obtain an act of incorporation, with an energetic police, it would be of no small benefit.

Had the inhabitants, instead of seating themselves on the flat land by the creek, erected their dwelling houses on the hills, surrounding them in front with clean and spacious court-yards, ornamented with trees, and, in the rear, with good gardens; they would have enjoyed, in addition to a very romantic prospect, an atmosphere seldom exceeded in coolness and purity, and would have lived much more pleasantly in a variety of respects.

Building on the hills has been lately commenced; and the example being set, it will probably be followed by many others.

A predisposing cause, of no inconsiderable power to the diseases of autumn, may be found in the diet of a considerable portion of the inhabitants. Not a small number eat much too freely of *fresh meats*; the market for vegetables is, at times, badly supplied, and many families are in a great measure destitute of gardens; hence they do not

use a sufficient proportion of vegetable aliment. Very little cyder or good beer is made in this part of the country, of course ardent spirits are used much too freely. The markets, however, in these and other respects, are rapidly improving, and the probability is, that in a short time the supply will be abundant.

Weather.

I proceed now to make a few observations upon the weather. These will necessarily be incomplete. No thermometrical observations are made in the town within my knowledge. Previous to the month of July, a day or two before the commencement of which I arrived here, the state of the weather is unknown to me. Some of the observations which I noted down from time to time since then here, follow.

During the first week in July, the weather was warm, the sky clear, the ground dry. From this time to the 22d, it was, with little exception, intensely hot. I have no recollection of any such long-continued period of extreme heat. The sky was clear, little or no rain fell during the whole time, of course the ground became much parched. The crop of hay in the country around was greatly cut short, in consequence of the drought. From the 22d the weather became cooler, and continued so for a few days. A considerable quantity of rain fell on the 24th. From this time to the 30th it rained every day, and several days largely, so that the earth was soaked with water. During this period also, there was considerable lightning and thunder.

August. From the 1st to the 18th a great quantity of rain fell. During this period it rained oftener than every other day. It descended not in what are called settled rains, but in sudden, and, in some instances, heavy showers, of which there would frequently be several in the course of the day. After the sky became clear, the weather was hot and sultry, the rains not serving to cool and purify the atmosphere at all. The common remark of the inhabitants was, that there was no elasticity in the air. Though I have said that the weather was hot, yet, during the latter part of the time, there were several very cool nights, succeeded by damp, chilly, foggy mornings, the middle of the day only being very hot. From the 18th to the 25th the evenings and mornings were very cool, and generally very damp, and in several instances there was a thick fog. The 20th there was a white frost

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on some low grounds in the village. The sky, during this period, was generally clear, but several days it was partially overcast with clouds. From this time to the 30th, it was clear and very hot during the day; the evenings were damp and chilly; no rain has fallen since the 18th. From the 30th of August to the 12th of September the weather was cool, but the difference between the heat of mid-day and the coolness of the evening was great; so that a change of clothes was very pleasant. From the 13th to the 20th the weather was warm in the middle of the day, and cool in the morning and evening. The 18th and 19th there were white frosts. From this time to the 25th it was warm—the remainder of the month was cool. All the rain that fell from the 18th of August to the 26th of September did not wet the earth two inches. The 26th a moderate rain.

In the month of February, Dr. Croswell informs me, the scarlatina anginosa began to prevail. It gradually increased till the month of March, when it was uncommonly rife; after this it generally decreased till it disappeared in May. A great number of children, and a considerable number of adults had the disease. It was not malignant, only one person having died of it. The local affection in the throat was, in some instances, however, considerably severe.

In May and June, intermitting fever was uncommonly frequent. More instances of it occurred at this time than during the three preceding years. It yielded very readily to the bark.

In the month of July, a considerable number of cases of cholera infantum occurred, and among adults a few cases of dysentery; but these diseases were neither more prevalent nor malignant than they generally are in this place at the same season of the year.

In the month of August the epidemic, which is the subject of the following remarks, commenced its career. The two first cases occurred on the 10th; the third and fourth on the 11th; the fifth and sixth on the 19th. The four persons who first had the disease, were seized within twenty-four hours of each other. The three who were first seized lived in one house, and they composed the whole of the family at that time.

The first person attacked was Mrs. H. This case I shall relate with a degree of minuteness that may seem to some persons tedious and uninteresting. This I shall do, be-

cause the case appears to me interesting in itself, and because it is of importance to establish the nature of the disease.

Case. I.

Mrs. H. about forty years of age, has a large frame, but is of a delicate and irritable habit. She has been heretofore much troubled with flatulency and other symptoms of dyspepsia. She began to complain, Wednesday, August 10th, of general indisposition, such as languor, lassitude, want of appetite, and other symptoms, such as usually precede fevers. Not long after, a chilly fit came on. The symptoms soon becoming more urgent, Dr. Croswell was sent for. He saw her about eleven o'clock A. M. Her pulse was very full, quick, and hard for her habit; her face was considerably swollen and much flushed; her eyes of a fiery red, the vessels being turgid with blood; her tongue was moist and covered with a whitish fur; there was a stinging heat in the skin. She complained of great pain in the fore part of the head, and in the eyes, and about the loins; she was exceedingly restless and uneasy, anxious and desponding; her abdomen was swollen and tense; her distress at the stomach was very severe; she eructated much gas, and constantly called for cold water. He ordered an injection, and administered a dose of calomel.

At five o'clock P. M. Dr. C. having ridden out of town, I was sent for. All the above-mentioned symptoms prevailed to a great degree. She said that she was in no respect easier than in the morning, but rather worse. The injection had operated once or twice, the medicine had not. What medicine had been given, or what purpose it was intended to answer, I could not learn. From the swollen face, the excessive uneasiness at the stomach, and the frequent retching, I was inclined to think that some poisonous substance had been taken into the stomach, and ventured, notwithstanding the distension of the abdomen, &c. to prescribe an emetic of *tart. emet.* and *ipecac.* At this time came in Dr. C. and approving of what I had done, the emetic was accordingly administered. It did not operate well, though it was apparently of no disservice. The calomel which she had taken in the morning soon after operated freely, but her distress and uneasiness were not at all relieved. Not long after Dr. C. administered a small opiate, and made free use of the aq. ammon. acet. made with a considerable prevalence of the alkali

kali. Thursday, 11th, he commenced the use of calomel in small and frequent doses, and continued the aq. ammon. acet. Friday, 12th, at three P. M. I visited her in consultation. She was still very restless and uneasy, and complained of excessive burning and extreme sickness at the stomach; made frequent efforts to vomit, and occasionally puked a little greenish matter, which was exceedingly acrid. The inflammatory symptoms were, however, evidently abating. We continued the calomel, and instead of the aq. ammon. acet. commenced a very liberal use of sal. tart. This had an excellent effect. It relieved, to a very considerable degree, the extreme sickness and burning pain in the stomach, which no other medicine appeared to affect at all.

Her drinks were toast water, rice water, and chicken water; in the last of which a strong solution of sal. tart. was administered frequently, and in liberal quantities. The chicken water sat easter upon the stomach than any other food.

In forty-eight hours from the time of seizure, the fur flaked off from the tongue, and left it very red and dry.

Saturday, 13th. She appeared considerably better; her pulse was nearly natural; her countenance had become considerably clear; she was much less restless and desponding; her stomach was less irritable; she conversed rationally. At this time considerable yellownesss appeared in her eyes, and a less degree of it over her whole face. We ordered the medicines which were prescribed yesterday to be continued.

Sunday 14th. In the morning she appeared to be still mending. She was nearly or quite free from fever. In the course of the afternoon she became very anxious for her husband, who was severely sick with the same disease. Monday morning her anxiety, on this score, greatly increased. His death, which happened in the afternoon, agitated her exceedingly. At two o'oclock P. M. the countenance had assumed a dingy appearance to a considerable degree. This afternoon she vomited a considerable quantity of black matter resembling coffee grounds. Soon after her vomiting ceased, a violent *hæmorrhage uteri* came on. It was at first very offensive, and in clots. It afterwards became of a more healthy appearance.

Tuesday, 16th. She was extremely feeble and languid; her pulse was frequent and thread-like. Her drinks were chicken broth and porter, wine and brandy, as much of any of them mixed with water as she could be persuaded

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to take. Her medicines were spt. Minder. and occasionally alkalies, and, as necessity indicated, opiates.

17th Her situation was similar to that of yesterday. On the 18th her hæmorrage ceased, and her pulse flagged exceedingly, so that she appeared to be on the borders of death. For three or four days she has lain constantly on her back, with her knees drawn; and whenever sh fell asleep, her feet slipped down over the end of the bed. To-day she sleeps with her eyes half closed, and her chin fallen. She has had two or three stools every day for some time past, naturally, or procured by injection. Soon after the hæmorrhage had wholly ceased, the black-vomit came on again, resembling very exactly coffee grounds, except that it was of a little darker colour. On the 20th she had black-vomit, which resembled soot sprinkled in mucus, and diluted with water; it was also somewhat flaky.

21st. This morning her tongue was covered with black furr, and black matter appeared around her cheeks and gums. She vomited some blood, as the nurse said, the last night or this morning, and in the evening had a return of the black-vomit. Her perspiration is of a highly cadaverous smell. She is troubled occasionally with singultus, but it is chiefly after taking drinks. She has been frequently delirious within the three or four last days. It was not a delirium of the wild ferocious kind; it resembled silliness or fatuity. She takes nothing except the tinct. opii, and brandy and water. Her respiration is very deep, slow and heavy. The interval between each respiration was about half a minute, her breast rising very much. During the day she made several attempts to get up and walk about the room.

23d. Her hæmorrhage returned; she takes no notice of any thing whatever. About this time an enlargement and induration of the right parotid gland took place, and pretty rapidly increased. Dr. White, of Hudson, who visited her in consultation with us, advised fomentations of warm brandy and vinegar from her feet to her neck. This was done, and repeated once or twice.

Her pulse is fuller, stronger, and more regular than yesterday; her tongue is furred: a feverish heat exists in the skin: she complains of great soreness in the throat, and difficulty of swallowing: she hiccoughs occasionally: her perspiration is cadaverous to a very uncommon degree: her mind is quite rational. During the following night the symptoms were more unfavourable than ever.

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In addition to great debility, she was very incoherent in her ideas, was troubled with frequent hiccoughing, and constant uneasiness at the stomach: her throat grew more and more sore; and her tongue began to assume an aphthous appearance.

25th. This morning she appeared in all respects better, except about her tongue and throat: her pulse is quite regular, is not very frequent, and has considerable firmness: her skin is temperate: her respiration is less difficult: her countenance has some degree of animation in it: she is entirely rational: has had natural stools yesterday and to-day: she had her clothes changed without inconvenience, and relished a cup of coffee; but her tongue was more aphthous. In the evening her pulse was much feebler, and her tongue was covered with aphthæ. To relieve this complaint various gargles were used, but none answersd so effectually as strong gargles of yeast, or yeast mixed with sage tea. Between this time and the 27th, two or three distinct crops of aphthæ successively sprung up, and were subdued. Her throat became extremely troublesome. She had a constant drivelling from the mouth of tough mucus, which was exceedingly nauseous and offensive. The parotid gland had become as large, or larger, than a hen's egg, and very hard: her countenance had been gradually changing from a dingy hue to a deep yellow. Her urine, for a week or more, has been of the colour of strong ley.

29th. She is very uneasy at the stomach, owing, as she supposes, to the mucus from her throat getting into her stomach during sleep. This uneasiness was considerably relieved by alkalies and epispastics. In the course of the forenoon she voided several times urine of a deep green colour. Several persons who saw it, and one of them a lady very intelligent and accurate in her observations, compared it to the colour of the leaves of the yellow pine, or to the dye which is sometimes made in this part of the country from the leaves of hickory. In the afternoon she voided some of a less green colour, part of which I saw. Its colour resembled very exactly that kind of green which the leaves of Indian corn often assume after a drought, in the months of August or September, and which the corn in this part of the country had at this time assumed. It was as thick as common mucilage of gum-arabic. Into a small quantity of it we threw a few grains of the vegetable alkali: no effervescence took place. In the course of the day she expectorated two

two or three tough pieces of concreted mucus, resembling the membrane which is sometimes thrown off from the larynx in cynanche trachealis. In the evening the uneasiness of the stomach increased. Alkalies were continued, and a gentle cathartic of *pulv. rhei.* and *tart. vit.* administered, and an epispastic applied upon the abdomen.

31st. Her tongue is putting on a natural and healthy appearance: her eyes had become of a deep orange-colour, and glassy.

September 1st. She informs me that, from the time she was taken sick to within about four days, she had no recollection of any thing that had passed, excepting a single circumstance respecting her husband's death. From this time she continued to mend slowly: her appetite and strength began gradually to return. She took freely of columbo, bark, wine, &c. In a few days she got quiet sleep without opiates; 13th she rode out; and now, Oct. 10th, enjoys good health.

The enlargement and induration of the parotid gland excited considerable uneasiness and apprehension. At times it was considerably painful, particularly internally. Mercurial frictions were applied below it freely, and after some time it dispersed.

Case II.

The second person who was attacked with this disease was Mr. H. a repectable merchant in this place. He was forty-four years of age, tall, large, and well-proportioned: he was very muscular, and possessed a vigorous habit: his pulse was naturally very full, slow and regular. For several days previous to his sickness he complained of being slightly indisposed; and his brother, who was accustomed to do business with him daily, informs me that, for a week before his seizure, his breath was extremely offensive to the smell. So much was this the case, that he repeatedly advised his taking medicine, lest he should become sick. Wednesday, August 10th, in the morning, he sailed in a sloop up to Hudson. The weather was very hot and sultry. Having considerable business to transact, he walked up and down Hudson streets till he was much fatigued. In the afternoon he spent a little time with some friends, and was unusually cheerful and animated in his conversation. He returned on board the sloop between eight and nine o'clock in the evening. It was damp and chilly on board. She lay becalmed in the river several hours.

hours. About ten o'clock he was seized with a severe chilly fit, which was soon followed by great pain in the fore part of the head and eyes, in his loins, hips, and thighs; but it was most severe in his knees, and in that part of the leg where the gastrocnemius and soleus muscles unite to form the tendo-achillis. The pain he described as being more severe than all he had suffered in his life before. Early the next morning, viz. August 11th, the vessel returned to Catskill, and he was brought home. About eight A. M. he sent to Dr. Croswell, who found him with a pulse full, slow, and hard: his tongue was covered with a pretty thick whitish furr: he complained of great pain in those parts of the body before-mentioned, but said it was less severe than last night: *his face was considerably swollen* and flushed: his eyes were of a fiery red colour, and greatly pained by light: his skin was very hot: he was extremely sick at the stomach, and complained much of a burning heat in that organ: his bowels were costive.

The Doctor administered an emetic of *tartar emetic* and *ipecac. pulv.* which operated very well, and brought away a considerable quantity of bile. After a proper interval he gave him a liberal dose of calomel, and a second dose in the afternoon: it purged him considerably, but it brought away but little bile. After its operation was over he passed scybals in considerable quantity.

Friday, August 12th. This morning calomel and castor oil were administered, and operated pretty well. I saw him in consultation, at three o'clock P. M. His pains were much less severe; *his face was much swollen,* so that his eyes were half closed. This was so very remarkable that every person who came in observed it, and concluded that all the family must have been poisoned. His skin was hot and dry: his tongue was covered with a thick whitish furr: his pulse was very irregular. The first three or four strokes that I felt were full, slow, and hard: to these succeeded a small quick pulsation, and then a limping or hobbling pulse. Upon examining it a little longer, we found that it was not regular in any respect. The hobbling stroke, however, occurred as often as in one pulsation out of five.

Dr. Rush has, in some of his works, mentioned a pulse of this kind. How he defines it I do not recollect; but in this patient, in whom I observed it frequently, it seemed as though, during the first part of the stroke, there would be a regular full pulsation, but it soon dropped away, and the

the remainder of the stroke was small, and dragged feebly after. He was very uneasy and restless, was troubled with constant nausea, frequent retching, and occasionally with vomiting. He was continually tossing from one side of the bed to the other; and was considerably stupid. It appeared as if the miasmata which produced the disease had acted with so much virulence and force as to produce, in a great measure, a prostration of excitement.

The propriety of blood-letting was canvassed, but it was thought prudent to defer it. Calomel was ordered in small and frequent doses. The spt. Mind. and occasionally alkalies, were made use of to relieve the stomach sickness. His drinks were the same as in Case I. but chicken water appeared to sit easier upon the stomach than any thing else.

Saturday, 13th. He was in no respect altered for the better, except that he had little or no pain. He was very uneasy. For a minute or two he would sit up, then lie down, and toss about the bed, seeking to find some relief from a change of posture. The whites of his eyes were considerably yellow. His pulse being still too active, blood-letting was again proposed, but it was thought prudent to defer it for a few hours, to take the exacerbation. No distinct remission had taken place since the commencement of the disease, and nothing like exacerbation took place to-day, except that about twelve o'clock, the face became a little more flushed.

Dr. Croswell bled him at this time in the arm, from a large orifice, about ℥x. The blood flowed freely. Three hours after, on examining it, we found a thin dense, livid skin on it, extending over the whole surface. There was not the least separation of the serum and crassamentum. The whole mass was of one uniform appearance and consistence, soft and fragile, like dissolved blood. The skin was removed, and some hours after there was about a tea-spoonful of a highly yellowish serum separated, and the mass was a little more firm. It never assumed a florid colour at all. From this may we not infer that a certain healthy state of the blood is necessary in order to imbibe oxygen, or that there is some principle in the blood capable of being destroyed by disease, which, in combination with oxygen, is necessary to produce the red colour of the blood?

His pulse, for two or three hours after bleeding, was regular, soft, and slow; in other words, it was nearly quite natural. It then became one-third more frequent,

quent, and less full and tremulous. This afternoon, after taking some spt. Mind. and drinking a little beer, he vomited some dark-coloured matter, of a flaky appearance; his stupor greatly increased. Vigorous efforts were made to salivate him. Sinapisms were applied to the feet, and large epispastics to the abdomen and neck. They produced some redness in the skin, but no lymph was raised, except here and there a little of an orange colour. This afternoon entire suppression of urine came on, and no stools could be obtained either by cathartics or the most stimulating injections, though both were administered liberally.

Sunday, 14th. In the morning his stupor had increased almost to coma. A streak of a dingy hue ran up each side of his face, from his neck along the back part of the under jaw to the temple. He had no stools nor urine passed to-day: his tongue had never cleared at all, except that a piece about as big as a half-dime peeled off, and left it red and dry underneath.

Monday morning, all his symptoms were much aggravated. His throat became exceedingly sore, so that he could not swallow a tea spoonful of water without great agitation, and threatening symptoms of strangulation; his respiration was very difficult, and soon became extremely laborious. Subsultus tendinum came on early this morning, and increased till every part of his body was affected with violent convulsions, and he died in vast agitation about four P. M. His face had become of a dirty yellow colour.

Case III.

Emma, servant in Mr. H's family, was next attacked with this disease. She was taken sick early in the morning, Agust 11th. I saw her but twice, and cannot describe her case minutely. Dr. C. informs me, that she complained of great pain in the fore part of the head, and in the eyes, loins, and hips; that her eyes were very red; that she complained much of sickness at the stomach; that her fever was dispossessed of alternate *remissions* and exacerbations: in short, that it was a clearly marked case of yellow fever, but less violent than either of the preceding cases. She was entirely recovered in ten or twelve days.

Case. IV.

About the same time that Emma was seized, Conright Briggs, a ship-carpenter, began to complain of the symptoms of this disease. I did not see him at all during the month

month of August. Dr. C. considered his as a decided case of the disease. After some time he began to convalesce, and as he recovered his health he used ardent spirits much too freely. He gained strength very slowly indeed. Thursday, the 8th of September, he was employed a considerable part of the day in hunting, in consequence of which he became much fatigued. Sunday, 11th, he walked about town most of the forenoon, making preparations for a journey. The weather was hot, and he complained of being much wearied. About half past four P. M. he was seized with fever. I saw him at this time. His pulse was considerably full, hard, and frequent. His eyes were of a dull, or, perhaps, more properly, of a *yellowish* red: his face was much flushed: his skin imparted a sensation like the incipient stinging of nettles: he complained of no pain or sickness at the stomach, but he was very restless, uneasy, and desponding, and continually tossing about the bed: he was also unusually stupid. His bowels, he said, were very free, and had been so for several days. A small quantity of tartar emetic in solution was administered, together with some warm drinks, which soon sweated him. About an hour after I called in again: he lay quiet, and said he felt much easier, and recollected that he had no stools within two or three days. Calomel was given to operate as a cathartic, and afterwards in small and frequent doses, so as, if possible, to affect the system. I saw him occasionally after this, but not regularly. In the evening an entire suppression of urine took place. During the next evening, viz. 13th, he was affected with black-vomit to a great degree. On the morning of the 14th he threw up an enormous quantity of it. At this time he was extremely stupid. About eleven o'clock A. M. he said he felt much better, and was hungry, and called for some bread and meat. Some person gave him some toast and water, of which he ate a little. He almost instantly became very uneasy. I saw him about this time. He appeared to be much distressed. His eyes were yellow: his countenance had assumed, to a remarkable degree, that tawney hue so frequent in yellow fever: his extremities were cold, and bedewed with clammy sweats: he was affected with violent subsultus tendinum, and died shortly after.

[To be continued.]

To the Editors of the Medical and Physical Journal.

Gentlemen,

On looking over your Journal for January last, I was astonished at seeing the following paragraph in your Review of Mr. Platt's "Inquiry into the Efficacy of Oxygen in the cure of Syphilis."

——"Mr. Whately's revived notion of ulcers in the urethra is introduced; and Mr. Platt expresses his surprise at an opinion so inconsistent with experience, an accurate knowledge of the parts, and of the disease." Medical and Physical Journal, No. 71. p. 79. I shall now give a *faithful extract* of Mr. Platt's own words, from whence this quotation is taken.——"It is with some degree of surprise, I observed in a very recent publication,* a revival of those opinions which have been considered almost obsolete. It is *there* remarked, that gonorrhœa is *invariably attended with ulcerations in the urethra.* Various authorities are quoted by this gentleman in support of the accuracy of his opinion, but most of those authorities are of a date anterior to the period when any difference on this subject prevailed, &c."†—— I shall next give a *faithful copy* of nearly the whole of page 12 of my Essay on Gonorrhœa, from which this gentleman has made his extract, and expressed so much *surprise.*

"It has been believed, that the gonorrhœa arose most frequently from ulcerations in different parts of the urethra, or the glands adjoining to it; but the researches of modern anatomists seem very nearly to have overthrown this opinion; and it has of late been asserted, that an ulceration of the urethra never takes place in this disease. This doctrine appears to have been first advanced about the year 1750, by that celebrated anatomist the late Dr. William Hunter, who taught it in his lectures. But although it is certainly true, that in *most* instances of gonorrhœa there is *no ulceration* of the urethra; it is equally certain that this is not universally the case, as such a disease does *sometimes, though rarely,* occur. In my own practice, I have in a common gonorrhœa, *now and then,* met with ulcers in the urethra. Where its orifice has been naturally wide, I have *several times* distinctly seen them,

* Whately's Practical Observations on the Gonorrhœa Virulenta, p. 12.

† See Platt's Inquiry into the Efficacy of Oxygen, &c. p. 19.

 both

both a little within, and at the extremity of this canal. In a *few other cases*, I have had no doubt but that ulcers have existed in the urethra, &c." p. 12.

After these extracts it might be deemed unnecessary to add any remarks; but as Mr. Platt may possibly refer to other parts of my work in support of his assertions, and as my expressions on the difference in excoriation on the surface of the membrane of the urethra in the different species of gonorrhœa may be misconstrued into evident ulcerations of that membrane, if not taken in connection with other sentences, I shall make a few other extracts, in order to prevent a controversy on this business.—" Where neither of the kind of ulcers before-mentioned exist in the urethra, there is certainly a considerable difference discernable in the depth to which the poison penetrates into or excoriates the inner membrane of the urethra in different cases of gonorrhœa, &c. &c."—— In a note at this place I have said, " That in some of these cases, this disease is a mere superficial inflammation of the inner membrane of the urethra, without any apparent irregularities on its surface, or any induration of the corpus spongiosum; in others, the diseased surface is unequal and rough, like that of a file, and when minutely viewed, would, no doubt, be found to be a congeries of ulcerations. I have seen such a surface so raw as to bleed after every evacuation of the urine." Ib. page 17.—In a subsequent part of this Essay, I have divided this disease into three different species.

1st. " The gonorrhœa attended with ulcer in the urethra, &c."

2d. "The gonorrhœa attended with marks of a considerable inflammatory affection of the urethra, *but without any appearance of ulcer.*"

3d. " The gonorrhœa *unattended with any of these circumstances,* its *chief* symptom being a small purulent discharge from the urethra." p. 33.

In the following page I have remarked, that in all gonorrhœas of the second species, " We have reason to conclude from the observations already made, that the poison has penetrated into and excoriated the inner membrane of the urethra to some depth, though it *may not have produced actual ulcers in it.*" p. 34.

I have made these extracts as concisely as possible, that I might not occupy too much room in your valuable Journal.—I shall enter into no controversy on the subject, but conclude with expressing *my surprise,* that any gentleman should

should be guilty of misrepresenting the meaning of any author from whom he differs in opinion.

I am, &c.

Grafton Street, Feb. 15, 1805. THOMAS WHATELY.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

BEING one of the medical profession, I think it my duty to communicate every thing which has a tendency to increase the knowledge and cure of diseases. The following case of Phthisis Pulmonalis, although but short, I hope will not be unacceptable to the readers of your excellent Journal.

A gentleman in the west of England, after being under the care of an eminent medical practitioner for two months, applied to a friend of mine; and on examination found him to be in the last stage of a consumption. The symptoms were, a frequent cough, a copious and fœtid purulent expectoration with two daily exacerbations, which were preceded by a sense of coldness; his urine was high coloured, and deposited a copious branny red sediment; appetite not much impaired, thirst inconsiderable. He was ordered the following emetic draught. ℞. Cupri vitriolati gr. x. aquæ puræ ℥ij. M. vespere sumend. After the emetic had operated he took an anodyne draught, cum tinct. op. gt. xx. He slept much better after the anodyne draught than he had for some time before; he then was ordered the digitalis with opium in the following manner. ℞. Pulv. digital. opii purif. aa. gr. x. Cons. ros. q. s. ut fiat pilulæ xx. Sumat j. nocte maneque. He also took the following decoction. ℞. Lichen. islandic. ℥j. rad. glyc. inc. ʒij. aquæ puræ ℔jß. coque ad ℔j. et cola sumat ℥iv. ter quaterve in die.

After taking these medicines three days the hectic symptoms left him, and he was able to take an airing on horseback, which he had not done for some time before; and by strictly following the above medicines eight weeks, he perfectly recovered. His diet consisted of shell fish, fowl, and vegetables

I am, &c.

Bristol, Feb. 10, 1805. W. L.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

FROM your indulgence in inserting my case of compound fracture, (Medical and Physical Journal for October, 1803) I am induced to request you will allow me, through the medium of your widely extended and truly valuable publication, to return my *sincere thanks* to Mr. Cuming, for his recommendation of *nitre*, (Med. and Phys. Journal for April and Dec. 1804) in *cases of sphacelus*. I have recently had a case of that description, where every effort to relieve the patient proved fruitless, until I resolved upon the application of nitre; in which I was seconded by my very respectable and ingenious naval friend, Mr. Birtwhistle, of this place.

Having frequently experienced very good effects from the external application of crude sal. ammoniac finely powdered, in similar cases, and having previously formed a very high opinion of Mr. Cuming, from his style of writing, which I have repeatedly seen in your Journals, I was led to resolve upon giving a fair trial to nitre: I am happy in having it in my power to say the effect was favourable beyond my most sanguine expectation.

It would be superfluous to trouble you with the minutiæ of the case; suffice it to say, the whole class of stimulants and antiseptics were tried internally and externally; notwithstanding, the putrid diathesis increased daily, until arrested by this " sovereign remedy."

I shall conclude with joining Mr. Cuming, in strenuously recommending this invaluable medicine to the public; as one which, I flatter myself, will ultimately prove deserving their confidence and attention.

I am, &c.

C. SIMPSON, Surgeon.

Skipton, Feb. 6, 1805.

P. S. I shall, with your permission, at some future period, offer for insertion in your Journal a case of a very extensive and inveterate ulcer upon the leg, of thirty years standing.

To

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IMPRESSED with a due sense of your liberality, I have to request your permission for the insertion of this paper, in reply to Mr. Wilkinson's animadversions, so profusely bestowed upon me in your last Number, and so replete with *urbanity* and *good manners.* In endeavouring to vindicate myself from unmerited and unjust aspersions, I shall not fight the gentleman with his own weapons, which are empoisoned with invective and abuse, but will endeavour to keep myself within the sphere of moderation, from respect to myself and your publication, whose pages I should be unwilling to pollute by a spirit of recrimination, dictating, offensive, and unbecoming language; and will appeal, as I advance in my present pursuit, to such of the profession as are lovers of science, and desirous of improving the art of medicine, for their opinion, whether Mr. W's remarks are not likely to obstruct the path of medical knowledge, by deterring his professional brethren from publishing their observations, for fear of being arraigned at the tribunal of his *unmerciful,* or some other person's Cynical, criticism; because their communications may not be couched in such terms as may hold accordance with the delicate sympathies of their highly refined conceptions.

Mr. W. begins, by commending my zeal and industry, in pointing out such modes of treatment as I have found successful in practice; but blames me for what he stiles a confident, positive, and assuming manner of enforcing them. As a specimen of my manner, I beg leave to adduce the following quotation from my paper in No. 58, p. 497, when speaking of the efficacy of zincum vitriol. in the cure of agues.

"I only ask some of my medical brethren, such as are not acquainted with its virtues, (for there are certainly many who never heard or thought of its powerful effects) to give it a fair trial, whenever opportunity may serve."

Is this assuming? It is true I appeal with *confidence,* well knowing from the result of my own experience, that such gentlemen as are not wrapped up in self sufficiency, will find their expectations founded on my representation realized. Does Mr. W. wish to have truths told in a wavering, equivocal manner? To adopt such a plan, would

ill accord with the views of every benevolent man, in promoting the advancement of medical knowledge. It really affords me great comfort, and cause for exultation, that the soundness of my doctrine, and validity of my positions, have been lately evinced by a gentleman, who in all probability may not be inferior to Mr. W. either in point of discernment, or professional acquirements; I allude to Mr. Cooke, who in page 527, of No. 70, corroborates my assertions, by a statement of two cases, wherein the zinc. vitriol. effected a cure, when in the first instance, the cortex, and solutio arsenici, had failed.

Mr. W. also accuses me of impatience of contradiction, and want of temper; indeed, it would appear that his own temper and disposition are none of the best. I would ask him, what right he has to interfere with Dr. Scott and myself? The Doctor surely did not ask him to enter the field as his champion; then what could be his motive? It surely was not to excite fresh discord, and disseminate contention, as the matter of his paper has this tendency. I would again demand of him, "by what authority he doeth these things?" and whether he is another "Gallio, who careth not for these things?" He cavils with the spirit of a true Cynic, at my having mentioned in my paper of No. 58, that the remarks I had then made, were the result of *unerring observation and experience.* His ill-natured remarks on this passage, will not effect its conversion into ridicule and contempt, which seems to be his aim; for he remarks, "these are Mr. C's own words," and takes care to have them printed in italics. My observation, I conceive, might justly be said to be unerring, if its truth was proved by the test of experience; then let me appeal to my readers, if his outré comment can be considered consistent with that dignity of sentiment, and decorum of conduct, which should influence the mind of a gentleman.

Mr. W. observes, that I display a want of temper to *those* who differ in opinion with me; I reply to this assertion, that it is not correct nor liberal, for him to speak in the plural, when Dr. S. was the only person who differed with me.

Mr. W. says, in my paper on Leprosy, in No. 69, that I treat the flour bag of the late Dr. Cullen in a disrespectful manner. I should be glad if his remark was entirely confined to the *bag*; but it appears that he suspects the character of the Doctor to be implicated in this dusty discussion which, if my conjecture is right, his supererogation of zeal'

in'

in defence of the venerable and worthy preceptor, has hurried him out of the track of reason; and it behoves me to repel this, and all his unfounded and self-fabricated stories. I defy him to point out any passage in my paper wherein I made use of these, *his own* words, the "flour-bag of the late Dr. Cullen," which he wishes to father on me; indeed, it appears very evident, that there is a great want of candour and charity in this Mr. W's critique, for he declares, that it is "so called by Mr. Cuming, No. 69." Pray have the goodness to observe his note marked thus ‖ in No. 72, and then do me the favor to turn to No. 69, when I am persuaded you will think with me, that any man daring to coin whole sentences, for the sake of injuring a person's feelings, or loading him with unmerited censure, should be held up to public contempt. Can such conduct be considered as gentlemanly? He now states, alluding to my paper on leprosy, No. 69, "I shall not enter into a discussion of this case, which he after having, as he says, cured as a general affection, considered it as local, from its continuing in the form of fissures, &c. in the palms of his hands; and which he says, gave way to the application of a blister." In this instance he gives me another opportunity of exposing him to the censure of every honest man; the words of the above quotation are his own, and not mine. It is easy to vilify any person, provided the undertaker of this benevolent office should condescend to coin words, and assert in the most bare faced manner, that they were those of his adversary. I intreat my reader to consult my paper, and observe, whether I have said, that after I cured a *general* affection I considered it as *local.* This Mr. W. must have forged, for the sake of exposing me to ridicule and derision; but instead of a laugh intended at my expence, a contemptuous sneer will be retorted on him for such unmanly arts. Vox veritatis ad cælum volat. I must candidly confess I feel a strong propensity to treat Mr. W. in the way which his conduct so richly merits; but "bear, and forbear," shall have a becoming controul over my pen.

I observed in the paper which Mr. W. has so mangled, misquoted, and added to, "that though the cutis vera is the seat of the disease, it may be considered as partaking more of the nature of a local than a general affection." For who ever considered the itch as a disease of the habit? yet it pervades the whole body.

He now begins to praise me, and gives me credit for

 ingenuity;

ingenuity; on which account I must thank him, bearing in mind the good old adage, "Date Cæsari qua sunt Cæsarea."* A little further on, he observes, "yet the propensity or itch of snarling at our old masters, for it appears that Mr. C. from his own confession was a disciple of this great man," alluding to Dr. Cullen; I must again contradict Mr. W. whose erroneous (to say nothing worse of them) assertions, are so truly unaccountable; however proud I might be, of having had so great a preceptor, I must disclaim all pretensions to this honor, and challenge my adversary to point out, in any part of my writings, wherein "*I confess*" myself, as having been this pupil of Dr. C. He surely does not wish to impeach me of ingratitude! I shall tell him whose pupil I was; in 1792 and 1793, I attended the class of that amiable man Dr. Gregory, where I think, if my memory does not fail me, that I have seen Mr. W. who was pointed out to me as a man of ingenuity, for having invented a machine for the inflation of the lungs.

Having held up to public view, some of Mr. W's errors, I shall content myself with skimming over the remainder of his paper, in a cursory way. He accuses me of "barking at the dead old lion, and from whose *prey* himself had been nurtured when a young helpless cub." As I do not understand the sense of this "*and from whose prey,*" I shall be silent; though it may be very clever, it is beyond my conception. I have heard of whelps barking, and bears growling when they had got a sore head; but as I never hurt either Mr. W's head or heart, I do not know why he has attacked me.

Mr. W. again observes, "if I have noticed this error, or rather mark of disrespect, of Mr. C. to the memory of his late admirable preceptor, Dr. Cullen." I demand of him to prove to any liberal minded man, that I have been at all disrespectful; on the contrary, I can prove this assertion does not rest upon the basis of truth, by a quotation from my paper, No. 69, p. 406. "During my studies at a celebrated medical school, the flour-bag was the only application then in vogue for erysipelas; from an idea, that it was dangerous to employ refrigerants; medicines of this class are frequently termed repellents; and it would have been a happy circumstance for many patients, if their medical

* I give Mr. W. as *Cæsar*, my thanks.

medical attendants had not been frightened out of their wits, at the thought of this terrible name *repellent!*" The flour-bag which Mr. C. has so artfully tacked to Dr. Cullen, you perceive, is not mentioned by me, in conjunction with the venerable name of Cullen. This part of my paper relates to the practice which obtained in the Edinburgh Infirmary, the school I alluded to; and which the generality of students attend.

Now, for my disrespect to Dr. Cullen, these are my words: The famous Cullen, when treating on erysipelas, seems to conceive that no other application, save meal or flour, is admissable, except when there is a sense of throbbing in the part, indicating suppuration; yet I must dissent from such an opinion, though sanctioned by so great a writer. Is this the language of disrespect, the *famous* Cullen! so *great* a writer! Is it possible to be more respectful? But if Mr. W. considers dissention in opinion disrespectful, and this idea should become prevalent, we may bid adieu to every improvement in the profession. Thus it will appear, that Mr. W. has, Don Quixote like, been combating a phantom, which existed no where, save in his own brain; and if he hugs himself with the thoughts of having repelled "certain disrespectful insinuations aimed lately by a gentleman (with whom, speaking of himself, I differed in opinion) at the professional character of the late ingenious and benevolent Dr. Fothergill," I have a strong presentiment that this, his last attempt on me, will neither redound to his honour, nor give him cause for exultation; unless he has discovered a method of repelling a nonentity. He now takes his leave of the illustrious Cullen, and takes up the cudgels for one who, when put in competition with the other, may only be considered as a satellite; yet, strange to tell, his language, which before was only tinctured, becomes now surcharged with scurrility. "Mr. Cuming's disrespectful, and I fear, intemperate reply to Dr. Scott, more particularly as the Doctor, from the *ungentleman-like manner* in which he appears to have been treated," I shall be glad if my reader will have the condescension to read my reply to Dr. Scott, in No. 61, vol. 11, where I am confident he will find nothing either harsh or unbecoming. Let me now ask, if Mr. W. has acted the part of a gentleman towards me, in thus (without the smallest provocation) loading me with the opprobrious epithet *ungentleman-like?* indeed, it appears evident from my refutation of all he has hitherto advanced, that he has not

not a proper regard for truth, and that he conceives himself at liberty to say any thing he pleases. In another place he says, "I advance not these remarks from ill temper, enmity, or disrespect to Mr. Cuming." Can he consider such language complimentary! In a word, if this Mr. Wilkinson's knowledge of men, manners, and his duty as a member of civilized society, be so confined, he rather, than resentment, merits pity! For an answer to the whole of his critique, on my reply to Dr. Scott, I refer my readers to that paper; and assure Mr. W. that I cannot find the preparation of cuprum ammoniacum in that edition of the Edinburgh Dispensatory in my possession, printed in the year 1789. I have, since the perusal of Mr. W's *philippic*, perused the work with attention, and do still aver, that I cannot find it; alluding to the *preparation*, it is not mentioned in the index, nor is there a recipe for it; it is true, I now perceive, that under the head of copper, the name is mentioned; and it would appear, that they are apprehensive of the ill effects which might accrue from its use; otherwise, why is not the recipe found. With respect to his observations on my plan of treating sphacelus with nitre, they appear very frivolous; if he has stored up in his fund of knowledge a better remedy, the sooner he divulges it the better. He remarks, "should it hereafter appear that both these easily procurable remedies prove equally beneficial in the hands of others, his claim to *originality* in these will scarcely be disputed." I have, since these quaint remarks of his were written, witnessed the happy effects resulting from my practice, in a most deplorable case, which I published in No. 70, vol. 12; when I requested as a *particular favour*, that some of my medical brethren would, when opportunity offered, publish the result of cases which might occur in their practice; shonld they be disposed to place that confidence in it, which its efficacy so justly entitles it to. Mr. W. observes, speaking of zincum vitriol. which I recommended for the cure of agues, that I said, "it deserves the name of specific;" and that I never knew it fail. Never knew it fail is true; but, to say nothing worse of the former part of his sentence, it is extremely erroneous, and a declaration without foundation; for my words in No. 58 are, *more* entitled to the eptihet specific. I appeal to common sense, if Mr. W. does not wantonly pervert whole sentences, for the sake of gratifying his *benevolent disposition.*

He finally concludes, that his remarks are given fairly and

and candidly; whether this is the case or not, I have great pleasure in leaving to the decision of such men as will neither add nor diminish, nor condescend to fabricate aught, for the sake of unjust crimination.

I shall now take my conjé of Mr. Wilkinson, assuring him, that neither motives of enmity nor revenge have dictated my reply: I know, that my tenets are not taken from that sect who hold it just to retaliate, agreeably to the old law *of tooth for a tooth, and eye for an eye.* No, far different considerations influenced my mind; a manly sense of the injustice done me will sufficiently apologize, were any apology requisite, for repelling unmerited insult and unjust aggression; and, whether I have succeeded in my endeavour, will be best known by those who are not parties in the affair. I freely forgive Mr. W. and if he is not contented that the business should end here, let him appeal, as I have done, to the candid and unprejudiced, by whose decision I shall abide; hoping that the case at issue between us will appear as evident as that between Dr. Trotter and Dr. Clarke, with these exceptions, that the subject matter in debate is different; and that some people may suppose it necessary, audire alteram partem, whose silence does not admit of the most favourable construction; but Mr. Wilkinson does me the honour to insinuate, that some importance may be due to my communications.

I am, &c.

Romsey, Feb. 12, 1805. RALPH CUMING.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

FROM the commencement of your widely extended Journal I have read with marked attention every publication which has appeared therein, respecting the cow-pox; and had Mr. Goldson's pamphlet come forth in the early numbers, the cases therein recited would doubtless have increased that scepticism which then arrested me, and which had well nigh resisted those impressive truths, which subsequent experience has constrained me to acknowledge.

Some of your correspondents have regretted that such cases

cases ever came before the public; I am, however, disposed to hope, that the avowal of such ambiguous reports will eventually tend to confirm and increase, rather than injure the vaccine practice, a practice founded on the most permanent basis; fixed as the laws of Nature, and irrefragable as truth itself.

It is well known that the propositions of Euclid, and the axioms of our immortal Newton, have been repeatedly carped at; nay, that the truths of the Gospel have been disputed by a modern blasphemous politician, but that those doubts he has attempted to raise in atheistical minds have been happily dissipated by an abler politician, philosopher, and prelate, whose mild answers in his "Apology for the Bible," have abundantly refuted the sophistry of his opponent, and tended in an eminent degree, to establish those prophetic truths he has so ably contended for.

Not more established are these truths, or permanent are those axioms in my estimation, than the principles of vaccination as set forth by our *immortal Jenner,* and confirmed by the suffrage and united testimony of assenting millions.

After such an unqualified avowal, it may be expected that I should bring forward a string of evidence in support of these assertions.—The numbers I have vaccinated, when compared with those of other practitioners, are but inconsiderable; yet some of these, as being accompanied with a peculiarity of circumstances, may not be unworthy of notice.—In November 1800, I vaccinated Master W. aged two years, with recent virus procured from my late much revered friend, Dr. Cappe of York, who at that time laboured greatly to introduce the new practice, and whose important and judicious observations, as to irregularity and anomalous appearances, have been deservedly inserted in your Medical and Physical Journal, (vol. 5, p. 25.) and I may here likewise add, provided Mr. Goldson had attended thereto, it is probable the cases of failure he has given to the world, would have either been suppressed *in toto,* or mentioned only to confirm those truths which have now been above five years on record.—To return to my narrative; my little patient, much to the satisfaction of his friends, passed the disease (if such it may be called) in the most mild, distinct, and unequivocal manner; and in six weeks afterwards, by way of test, was subjected to variolous inoculation, along with a little cousin who had never been inoculated with either vaccine fluid or small-pox matter before. Master W's arms inflamed for a few days at first,

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and then subsided; no constitutional affection whatever ensued, whilst his little cousin, inoculated at the same time, and with the same matter, went through the usual routine of disease, had a considerable crop of variolous pustules which maturated kindly, and continued out the usual period; during all which time the two cousins (at my instigation) constantly slept, kissed, and played with each other, but without any effect or consequence whatever.

In December 1800, (as inserted in my letter in the York Herald) the small-pox was very prevalent in this neighbourhood; a subscription was opened for inoculating the poor of this town, and upwards of one hundred presented themselves to a brother practitioner and self. Amongst those which fell to my share, was a mother in her twenty-fifth week of pregnancy, three of her children, under seven years of age, and a sickly unpromising twin of another family, but in the same house. Notwithstanding it was the general wish that variolous matter should be employed, yet from the purest motives of humanity, I could not bring myself to venture thereon, but strongly urged the vaccine fluid, as infinitely milder and better calculated under such precarious circumstances. My recommendation was immediately complied with, the pregnant mother, her three children, and the twins, were immediately vaccinated a few days previous to the general inoculation of the rest with the small-pox. The result was fortunate, the mother and children passed the disease in the most favourable manner, and the former, at the usual period, brought forth a fine healthy girl; the sickly twin, whose life had long been despaired of, from mesenteric obstruction, scarcely suffered any thing from vaccination, and afterwards recovered his general health in a most unexpected manner. These six patients, from unavoidable necessity, mixed with the rest of those subjected to the small-pox inoculation; indeed, the whole atmosphere, from the varied situation of the remaining hundred, might be truly said to be compleatly variolated; and yet, from that moment to the present, they have effectually resisted the small-pox infection.

Allow me now to contrast this case of pregnancy with one less fortunate, which occurred to a medical relative of mine within ten miles of this place.—The patient, a mother (but farther advanced in her pregnancy) was about the same time extremely averse to the cow-pox, and was incessant in her solicitations for variolous inoculation; her medical

medical attendant injudiciously consented to her repeated importunities; the consequence was, a premature delivery, the death of the child with the small-pox upon it, and a providential but unexpected recovery in the mother, after a month of undescribable torture and suffering.

It is needless to state that vaccination was with extreme difficulty introduced in this neighbourhood at first, and that the popular clamour against it was strong; fortunately for us in this district, a few in the superior classes of life have subjected their offspring to the new practice, with the happiest success, and those in a lower sphere, perhaps more through fashion than conviction, have been insensibly led on to follow their example. This compliment which the poor have paid the rich, is nothing more than a proper return for the strange mode which the *fashionable nudes* of the present day have so inconsistently introduced, a fashion utterly incompatible with decency, health, and comfort, and which may hereafter draw some animadversions from myself, or an abler pen.

About four years ago, I met with an irregular case of cow-pox in the patient of a neighbouring practitioner; and from a guarded prognosis, at that time, the parents of the young girl were so prudent as to subject her to small-pox inoculation a year afterwards; the event fully verified my fears, and proved her to have been insecure, as she passed the disease in a regular manner, had a few distinct variolous pustules, with a trivial febrile indisposition. Had this case, which put on extensive but spurious inflammation, not been attended to at the proper period, no doubt but it might have lulled the parties into a false security, and have brought the practice into a temporary discredit.

Since the year 1800 to the date of this (February 1805) I have continued to follow the vaccine practice; my patients at various distances have never yet suffered from variolous infection, although they have frequently been exposed to every possible risk, and were at times surrounded with small-pox. Had any failure occurred, averse as the generality of the public at first were, it is but fair to infer they would have sounded the alarm with envious satisfaction. It is true that in some instances I have had to inoculate a second, third, and even a fourth time; yet, this proves only what I have publicly asserted four years ago, viz. "That the cow-pox is assuredly a much milder disease than the small-pox."—"That the insertion of the former is accompanied with more ambiguity than the lat-

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ter, unless the fluid be employed soon after taking."—"That the failure may be in proportion to its comparative mildness, as its virus, in spite of attentive enclosure, sooner escapes."—"That the utmost circumspection ought to be paid as to its regularity and progress, and that as the disease (like others to which the human constitution is prone) is subjected to certain laws and regulations which are fixed and immutable, it is not less the duty than the interest of every practitioner, sedulously to watch and study these, as emphatically laid down by the great Discoverer, and others, and thereby to discriminate between such true and spurious appearances as may at any future period occur."

During this last month I have vaccinated twenty-two patients without a single failure, with matter obtained from a medical friend at Malton, without any irregular or anomalous appearance; and notwithstanding the many truly laudable and philanthropic Institutes, which are so generally dispersed in the metropolis for the convenience of the medical world, it has been thought expedient by others, as well as myself, to endeavour to establish what I would call a Provincial Jennerian Circle, for the more ready and immediate accommodation of the public with cow-pox virus. On this subject, as well as on others connected therewith, (should this testimony of mine now obtain admittance in your Journal) I may hereafter again address you. At present, I would beg a tender of my thanks to the gentlemen of the different medical committees, who have so generously and publicly stepped forth in distributing gratuitous supplies of vaccine virus to every practitioner in the united kindom.—Their efforts, aided by the concurrence of medical practitioners individually, may, I doubt not, accomplish the *extermination of the small-pox*, and thus free the world from one of the most dreadful maladies that ever raged among mankind.

Although I am professedly a strong advocate for the cow-pox, yet I can hardly subscribe with your worthy correspondent, Mr. Ring, who in his zeal for the good causes, would consign every one inoculating for the small-pox to the utmost rigour of the law.* I would more charitably invite him to give vaccination a fair, candid trial, and then

* Vide Mr. Ring's Compendium of Vaccination at the end of Anstey's Ode to Jenner.

then dare him conscientiously to acquit himself of that trust which a confiding public have placed in him.

It is needless to say that common sense, common honesty, and strict justice, would constrain him, as it has done me, to prefer vaccination, and never to obtrude a severe disease on his patient, when his duty prompts him to recommend a mild one.

I am, &c.

Kirbymoorside, York, Feb. 11, 1805. T. HARRISON.

Mr. Shoolbred, on Vaccine Inoculation in Bengal.

(Continued from pp. 245—257.)

I shall prefix to the Analysis of Mr. Shoolbred's Report, a copy of a letter I received from him, together with the Report.

" SIR, *Calcutta, June* 21, 1804.

" HAVING observed that you have been at uncommon pains in collecting information from all quarters, on the subject of vaccine inoculation, and in tracing the history of its progress from the first promulgation of its discovery by the immortal Jenner up to the present day; I presume it will afford you some gratification to know what has been done in India, with a view to the preservation and dissemination of so great a blessing to mankind: I therefore beg leave to present you with a copy of the Report on the introduction of the vaccine disease into India, and its progress in Bengal, up to the conclusion of last year, which has just been published by order of this Government.

" You will observe, that this small work is to be considered as merely an official communication to the Bengal Medical Board, for the information of Government; not as a regular treatise on the vaccine disease, written with a view to its coming before the public. It is therefore entitled to much indulgence.

" You will also perceive, that I have taken the liberty of making use of some part of your valuable work, of which I have hitherto seen only the first volume; and that in such a way, as only to obtain a very hasty and cursory perusal of it; a circumstance necessary to be mentioned, lest I may have stated any thing which a more careful perusal might induce me to alter. I am impatient to see your

your second volume, which I remark as being published, though it has not reached this country.

"The last communication I saw of your's was in the Medical and Physical Journal, for Dec. 1803; in which, you state your opinion, that the heat of the weather does not diminish the activity of the vaccine fluid, when immediately transferred from arm to arm. I was of the same opinion while the cold weather lasted; but when the thermometer rose to upwards of 90, I was convinced, by a very alarming number of failures, that the fact, however difficult to account for, was certainly otherwise.

"The infection was last year lost at one of the stations, from this cause. It is now extinct in two others, and has been in jeopardy in my own hands; on no other account which I can discover, but that the fluid at a very high temperature loses much of its virtue, even when used at the instant of its secretion. How this happens, while the disease, when it takes place, exhibits all its genuine characteristics, I am unable to explain.

"I have not observed any difference in the susceptibility of infection, depending on different shades of colour; nor does your observation on the rapid progress of the disease in negroes, appear to hold good in the black natives of Bengal. The course here is much the same as in Europe; with no difference between blacks and whites sufficient to attract observation.

"I am, &c.

"JOHN SHOOLBRED,

"Supt. General of Vaccination in Bengal."

Here it is necessary to remark, that Mr. Shoolbred notices one rule, on which I lay a particular stress respecting the practice in hot climates, but not another, which I consider equally indispensable, namely, that of taking the matter *at a very early period.*

He says, indeed, there is no material difference in the progress of the cow-pock in blacks and whites. On this point I am not competent to decide; my information was derived from the report of Dr. Dupuytren of Paris; who had much better opportunities of ascertaining the fact. We all know, however, that the progress of the disease is most rapid in hot weather; for which it no where appears, that Mr. Shoolbred has made any allowance, either in his inferences or his practice.

In the summer of 1800, I inoculated six children, with two punctures in each arm, from a child in Marshall Street, London

London Road; and out of the twenty-four punctures, only one succeeded. Yet subsequent inoculations proved, that neither of the subjects, on whom the operation failed, had previously had the small-pox.

At that time I followed the rule laid down by the latest writers; that of taking matter at any period when I could find it. In the present instance, the weather was extremely warm, the areola very vivid, the vesicle very large; I am, therefore, at present, not surprised at the result.

I am well convinced, from the concurrent testimony of the various authors who have given an account of the phenomena of vaccination in India, that the disease is more rapid there than in this northern climate. Yet Mr. Shoolbred's general rule was to take matter on the eighth day; a day when the matter is sometimes almost effete, in warm weather, even in this country, as I have repeatedly experienced.

But I am still more fully convinced of the rapidity of the vaccine pustule in India, from a representation of it accompanying the Report sent me by Mr. Shoolbred; in which the areola on the fourth day is as large as it is here on the tenth. As far as it is possible to draw a conclusion from this plate, the matter ought to be taken on the third day. This has been done, in cases of emergency, even in our cold climate, and with success; it is therefore worth attempting in India, where the lives of millions depend on perpetuating the practice.

But I have another, and a stronger reason, for supposing that the matter in India was not taken at a proper period; which is, that Dr. Marshall preserved the vaccine infection under a still greater degree of heat. In the Medical and Physical Journal for January, 1804, is an extract of a letter I received from him on that subject, in which he says, "In this month's Medical Journal, I observe a letter from Mr. Weston of Jamaica, to you, is inserted; in which he says, he is obliged to acknowledge the lamentable fact, that in a temperature of 90, the vaccine matter loses its activity.

"This to me appears a very extraordinary acknowledgment; for during the time that I was at Gibraltar, in Aug. 1800, the temperature was never so low as 90, and frequently at 96; during which time I never observed any particular difficulty in communicating infection, more than in England; nor can I conceive any probable cause for its failure in Jamaica."

Dr. Marshall adds, "From my original memorandum, now

now before me, I find your observation upon the rapid progress of the disease in negroes just; since the arm of this man yielded matter for inoculation on the third day." Here was no motive for taking matter at a very early period; on the contrary, Dr. Marshall wished to protract his inoculations, in order to convey recent matter to Gibraltar. It is therefore reasonable to suppose, that there was a distinct vesicle, fit for the purpose of inoculation. A case mentioned by Dr. Coxe rather confirms the idea of the disease being more rapid in the Negro. That it is more rapid in a warm temperature is certain; and, I trust, in future, this circumstance will be particularly remembered in practice.

Mr. Shoolbred commences his Report with a concise view of the introduction of the disease into India, and the means employed to ensure its permanent establishment in that quarter of the world, previous to his appointment. The office of Superintendant General of Vaccination was first held by Mr. Russel, who discharged the duties of that office in an exemplary manner, till he was obliged to leave India on account of ill health. All the European children in Calcutta and its neighbourhood were speedily vaccinated; and the blessings of the practice were widely diffused.

Previously to Mr. Shoolbred's succession to that important office, he had kept up a series of successive vaccinations at the Native Hospital; and, with the concurrence of his Excellency the most noble Patron, and the Governors of that humane institution, formed a plan for extending its benefits to all who might desire it in Calcutta, as well as for securing a depôt of genuine matter under his own eye. He had also an opportunity of making experiments, in order to ascertain the efficacy of the cow-pock as a preventive of the small-pox.

The Medical Board at Calcutta, wisely considering that the preservation of the vaccine virus to Bengal, and perhaps to India, was a matter of too much importance to be trusted to the casual zeal of a few individuals, which might evaporate when the novelty of the practice was over, laid before the government a plan of an establishment every way calculated to secure to that country all the advantages of vaccination. This plan the Governor General ordered to be carried into effect. Subordinate superintendants of vaccination were appointed at eight different stations, in order to preserve and distribute the virus; under each of whom a number of the surgeons were directed to officiate, in promoting the general view of the institution. Thus the

vaccine department was placed on a regular and permanent footing.

The Medical Officers on the establishment of the Company have in general shewn a disposition to co-operate with the superintendants, and done all in their power to promote the benevolent views of the government. But we are informed by Mr. Shoolbred, that the whole tribe of Bramin inoculators are, from interested motives, determined enemies of the new practice; and that, by their influence over the minds of the people, they have in many instances prevented them from bringing forward their children. This, together with the indolence and stupidity of the natives, will for a while prevent them from reaping the full benefit of so great a blessing.

After giving a detail of what has been done towards the propagation of the practice, Mr. Shoolbred takes notice of what still remains to be done. There are two places to which the Governor General is desirous of transmitting the matter; one is Port Jackson, the other China. To these two distant quarters it was proposed to send it in living subjects, by means of successive inoculations; but it was at that time impossible to procure a sufficient number of subjects for the purpose.

The number vaccinated in Bengal within the first year is upwards of eleven thousand. This number is not great; but the Bramins, the ancient inoculators, like too many of our ancient inoculators, have thrown obstacles in the way of the practice. Their sacred function gives them the greater authority; and the people themselves are ignorant, and of course prejudiced against all innovations.

By the publications of Dr. Anderson and Dr. Keir, we were taught to indulge a flattering hope, that the circumstance of this boon coming from the cow, an animal so highly revered by the Hindoos, would have operated in its favor; but we are informed by Mr. Shoolbred, it is directly the reverse.

After stating, that in Bengal one in sixty or seventy dies under inoculation of the small-pox, and one in three by the natural disease, and calculating the number of lives already saved, Mr. Shoolbred concludes his Report in the following manner:

"These are positive advantages already obtained by the introduction of vaccine inoculation into Bengal, which the intelligent part of society know how to estimate. What we have to look to in future appears to me to be, not only the continuance of the blessings before enumerated, but the

the animating prospect of a sure and solid foundation having been laid for its universal diffusion in India, as well as to our eastern settlements, to Java, China, New South Wales, and even to the numerous islands scattered throughout the Pacific Ocean. In contemplating a period so auspicious to the happiness of mankind, and so glorious to the name of Jenner, we cannot help anticipating, that, while an approving Sovereign and an admiring Country do justice to the talents, the wisdom and energy so eminently displayed in the military and political career of our most noble and illustrious Governor General, it will not escape the notice of the philosopher and the philanthropist, that the same distinguished administration was no less conspicuous for the humanity, than for the vigour of its measures; and that to the encouragement afforded to vaccine inoculation, by His Excellency the Most Noble Marquis Wellesley, so large a portion of the globe has been indebted for the enjoyment of the inestimable blessings derivable from the greatest discovery that ever was made by man for the benefit of his fellow-creatures.

"JOHN SHOOLBRED,

"Superintendant General of Vaccine Inoculation."

Calcutta, March 22, 1804.

To this report is added an Appendix, containing practical remarks concerning the disease, as it appeared in India. It was introduced into Bengal in November 1802; and, in January 1803, Mr. Shoolbred put it to the test of variolous inoculation, which it resisted. It was also put to similar tests, as well as to that of exposure to the natural infection, by other gentlemen in different parts of India, with complete success.

Mr. Shoolbred would have repeated his experiments the following season, but the humane and judicious prohibition of variolous inoculation, in the neighbourhood of Calcutta, had cut off the supply of matter. This, however, he observes, is of little consequence, since the medical practitioners in that quarter of the globe had every reason to conclude, from the uniform and invariable character displayed by the disease, that the vaccine virus had suffered no diminution of power in their hands. On the contrary, from upwards of one thousand five hundred cases under his own care, as well as from the concurring evidence of all the subordinate stations, he was perfectly convinced, that the disease he then inoculated possesses in full force

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the prophylactic quality, which renders its discovery so inestimable a blessing to mankind.

"Even in the dark skin of the native of Bengal, the traits of genuine vaccination are sufficiently conspicuous to remove all doubts on the subject. The commencement of vesication on the fourth or fifth day, its gradual increase, circular form, depressed centre, cellular structure, and limpid contents; the surrounding tumefaction, or areola, where the skin is fair enough to shew it; the slight fever on the eighth, ninth, or tenth day, and the subsequent progressive conversion of the vesicle into its peculiar horny, dark-brown, glossy scab, dropping off from the fourteenth to the twentieth day, and leaving a permanent pitted cicatrix, are circumstances belonging to no other affection to which the human body is subject; and which, in my opinion, would stamp vaccination with the full evidence of its specific power, if no opportunity of putting it to the test of experiment ever occurred again."

As to the inoculation of the small-pox, Mr. Shoolbred says, it is truly believed, that although it often saved the individual, it has not lessened in the aggregate, the dreadful expenditure of human life occasioned by this disease.

He has not observed any other degeneracy of the virus from the high temperature and moist atmosphere of Bengal, than that it more frequently fails to communicate infection under those extremes. When it succeeds, the affection still exhibits all the essential characters of genuine vaccination.

Mr. Shoolbred copies from one of the Reports of the Vaccine Pock Institution, a passage containing an hypothesis of Dr. Pearson, in which he endeavours to explain the reason, why the virus becomes less efficacious after a certain period.

He supposes, that part of the active matter first secreted is absorbed; in consequence of which, a change is effected in the constitution, which puts a stop to the secretion of vaccine matter; and the secretion then becomes of a serous kind.

It is certain, however, from the success of vaccination with matter from the dry scab, that a great portion, if not the whole of the active particles, remain unabsorbed. I therefore beg leave to submit with deference another hypothesis, by way of solving this problem; namely, that simple dilution, independent of absorption, may occasion the temporary inefficacy of the matter; and simple inspissation,

sation, in consequence of evaporation by the cuticle, may restore it to its pristine activity.

Mr. Shoolbred made some experiments, in order to determine how far Dr. Jenner's opinion was well founded, that persons who have had the small-pox or the cow-pock, are still susceptible of the latter. Mr. Shoolbred is correct in his idea, that such are much less susceptible of the disorder than before. This, however, is the very doctrine originally taught by Dr. Jenner, and confirmed by other authorities, whatever has been insinuated to the contrary by any illiberal opponent. Several instances of the cow-pock taking place a second time, are to be found in the writings of Dr. Jenner; and, in the index of my Treatise on the cow-pox, I have referred to no less than ten places, where instances are adduced of its occurring after the small-pox. Any one who takes the trouble to examine those cases will be able to judge, how far the persons on whose authority they rest, merit the title given them by Dr. Pearson,—that of a few partizans.

Mr. Shoolbred candidly admits, that from my Treatise it appears, some persons have had the cow-pock after the small-pox. We are therefore, he observes, not warranted in saying that such a thing never happens; but only that it happens too seldom, to afford any reasonable prospect of keeping up the virus this way.

From the same source Mr. Shoolbred learned, that cows had been vaccinated from the human subject; and that the disease had been restored to the human subject again. He informs us, however, that before my treatise fell into his hands, he had made the same experiments; principally with a view of ascertaining the appearance of the complaint in the cow.

One striking difference which Mr. Shoolbred discovered between the cow-pock in the cow and in the human subject, was, that in the former, instead of being vesicular, it had more the appearance of an elevation of the substance of the teat itself. The vaccine fluid was limpid, but only to be obtained by pushing a lancet under the scab.

The only sign of constitutional affection was a diminution of milk; but whether this was owing to a discontinuance of milking, Mr. Shoolbred is unable to determine. The tumours resembled those represented by Dr. Sacco, or those which take place on applying a thimble exhausted of air on any fleshy part of the body. These experiments were instituted with a view to facilitate the preservation of cow-pock matter. The mode he prefers, is that of

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a continual succession of inoculations in the human subject.

Mr. Shoolbred has made two very interesting inquiries; the first is, whether the indigenous cow-pox has ever been discovered among the cattle in India; the second, whether the Bramins were acquainted with the practice of vaccination before the promulgation of Dr. Jenner's discovery, as some people have lately alleged.

From the result of his inquiries, there is great reason to doubt whether the indigenous cow-pock has ever appeared in India; and the pretence of the Bramins to a previous knowledge of vaccination, is proved to be one of the basest forgeries ever attempted.

A Shanscrit manuscript was handed about, which, it was pretended, contained an account of the practice; but it was remarked, that the operation was directed to be performed after the European, and not the Asiatic manner.

The manuscript in question was therefore compared with other copies, and the imposition was detected. The part relative to the cow-pock was an interpolation; or, to speak in the emphatic language of Mr. Shoolbred, an impudent forgery. Such interpolations, I learn from this and other sources, are commonly practised in India, for the purpose of supporting the claims of the Bramins to priority in every kind of science.

They only practise inoculation of the small-pox during three months in the year; and then only in a partial manner; for we are told by Mr. Shoolbred, it is almost entirely confined to Bengal. Had the Bramins practised vaccination, they would not now be among the first to oppose it. The grease, it appears, is not known in India.

The small-pox has not prevailed epidemically in Calcutta since vaccination was introduced there, owing to the prohibition of variolous inoculation. A few sporadic cases have, however, occurred, sufficient to furnish matter for counter-proofs.

Mr. Shoolbred doubts, whether the natives have sufficient capacity to practise vaccination with success; but he has no doubt that they possess sufficient knavery to contaminate the matter, in order to bring it into discredit. He says, no sensible and conscientious man in Great Britain thinks of continuing variolous inoculation, since the value of vaccination is fully ascertained. The artificial introduction of the small-pox into Calcutta, has annually consigned thousands of victims to an untimely grave; and it is supposed, that scourge of humanity would

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have been less fatal, had it been left to pursue its natural course.

In your Journal for November last I mentioned, that Dr. Anderson of Madras, proposed to send a surgeon with cow-pock matter, and some children who are proper subjects for vaccination, to New South Wales, for the sake of conveying the virus in a state of activity to that remote region. In a former part of the present communication I observed, that the Governor General of India was also desirous of carrying this plan into execution; but that it was impossible to procure a sufficient number of subjects for the voyage. It is, therefore, with peculiar satisfaction, that I have just received advices from Mr. Savage, of the accomplishment of this important object, by means of vaccine virus which he received from me.

This event is the more memorable, on account of the length of the voyage, and the heat to which the matter must have been exposed in crossing the line. It has, indeed, been generally concluded, that under such circumstances, it was impossible it should ever prove successful. Our countrymen in India seem to have considered the conveyance of it from that quarter as a hopeless attempt, unless it were conveyed by successive inoculations, and a ship-load of children.

It has long been thought impracticable to transmit active matter to India by sea, though a shorter voyage. The failure of all the attempts hitherto made has been attributed to the effect of time, or heat, or the effluvia of various kinds to which matter is exposed during the passage. The last cause I have always considered imaginary, from the mode in which the virus has been packed up. The only cause to which I can ascribe the universal failure of such attempts, and of Mr. Savage's first matter which he carried out with him is, the difference of the vehicles.

The former were thread and glass. The first of these is nearly the same with the vaccinator, since it admits of being applied without diluting the matter. Glass is incapable of that advantage; and is more apt to fail than any other method.

Having in a great measure supplied the army with matter for almost two years, I have had ample opportunities of verifying this fact.

On a former occasion I noticed, that some of the natives of New South Wales bear evident signs of the small-pox. I have now before me a concise history of the English colony in that quarter; from which I shall extract a paragraph,

graph, that renders it probable the disease was first introduced into this part of the world, since the settlement was established.

"When that shocking and fatal malady, the small-pox, first made its appearance amongst these unfortunate creatures, says Governor Hunter, it was truly shocking to go round the coves of the rocks, where nothing was now to be seen, but men, women, and children, lying dead. As we had never seen any of these people, who had been in the smallest degree marked with the small-pox, we had reason to suppose they had never before been affected by it, and consequently are strangers to any method of treating it; and if we consider the different attitudes the dead bodies have been found in, we may easily believe, that when the malady assumes the appearance of this disorder, they are immediately deserted by all their friends, and left to perish for want of sustenance."

Mr. Savage, in his last letter, informs me, that when the small-pox was introduced into Botany Bay, among the natives, many hundreds fell victims to this merciless disease; and that, on numbers of those miserable wretches, it has left its ghastly traces behind.

He adds, "Nothing can appear finer than the pustule in every instance; and the disease, if such it can be called, observes precisely the form described by Dr. Jenner and yourself. A little drowsiness on the fourth, but more generally on the fifth day, is the only symptom; except, in one instance, a native boy of New Holland, servant of the Rev. Mr. Marsden, who complained much of head-ach, and some feverish symptoms.

"Your zeal in the cause of humanity will be highly gratified at our joint success, in this fifth grand division of the globe; and our Friend Harwood, who rejoices 'in all the good of all mankind,' and who was in some measure instrumental to the introduction of the vaccine-pock into this country, will derive equal satisfaction from the event.

The following articles appear in the Sydney Gazette of the 3d of June.

"NOTICE.

"As the cow-pox is now fully established in the colony, it is hoped no parents or guardians of any children will omit availing themselves of so great a blessing; which, as has been shewn in the Gazette of the 13th of May last, is an infallible preventive of that generally fatal distemper, the small-pox.

"NOTICE.

"NOTICE.

" Mr. Harris, Surgeon of the New South Wales Corps, informs the parents of children belonging to the military, that he will inoculate with the vaccine infection, those who choose to attend him, at his house at Sydney, every Tuesday, and at his house at Parramatta, every Saturday, till further notice."

In the aforesaid Gazette is a letter from Mr. Jamison and Mr. Savage to the Governor, in which they inform him, that vaccine matter from another source failed; but the matter received from me succeeded; and Mr. Savage having vaccinated several children from that in which infection first took place, they are decidedly of opinion that the cow-pock is completely established in the colony. To further its propagation, they request that the Governor will give orders for parents to attend at the hospital at Paramatta. They promise to give notice, when it is established at the other settlements.

The following General Orders are inserted in the same Gazette:

" Such children as the parents or guardians may wish to have inoculated, are to attend at Parramatta, on Tuesday and Wednesday next; after which a permanent attendance will be directed at Sydney, Parramatta, and Hawkesbury.

" By Command of His Excellency,

" G. BLAXCELL, Acting Secretary."

In his letter, dated August 3, 1804, Mr. Savage says: "A great number of subjects have now been inoculated; and, to prevent the possibility of losing the virus, we limit the numbers to four or five at a time, in each settlement."

Whenever this topic is introduced, it cannot be unseasonable to remind medical practitioners, that it is always proper for them to keep matter, taken at an early period, on vaccinators. From the foregoing account it is evident, that these, when well charged, even under the disadvantage of a warm atmosphere, will preserve matter in an active state many months.

I am, &c.

JOHN RING.

New Street, Hanover Square, Feb. 15, 1805.

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To the Editors of the Medical and Physical Journal.

GENTLEMEN,

As you have frequently expressed a wish, that in the event of meeting with any epidemic disease, I would make known to you the circumstances attending it; I lose no time in acquainting you, that (in the absence of the surgeons of the corps) the Deputy Inspector of Hospitals consigned to my care on the 11th of January, the hospital of the three troops of the Waggon Train stationed at Canterbury; which at this time contained such cases only as are always to be met with in military hospitals. But on the 4th of February, a man was admitted with fever; on the 9th three men with fever were admitted; on the 12th, two; 13th, one; 21st, three; 22d, one; exclusive of three non-commissioned officers attacked between the 15th and 21st, being nearly one-tenth part of the men present.

Those men were attacked in a manner nearly similar; the disease was ushered in with severe rigors, loss of appetite, disturbed sleep, and nausea. They complained principally of pain in the head, loins, and extremities; thirst; and weakness. On their admission the pulse was generally quick but weak; the tongue white or furred; the heat of the body was frequently not increased, although in most cases it *soon* became much greater than in health. Derangement of the biliary system was very striking; and in several cases very large quantities of bile were evacuated.

On first seeing the patient I invariably directed that an emetic should be immediately given, and it was most commonly followed by six grains of calomel; if the heat of the body became greater than in health and permanent, cold affusion was had recourse to; if much fever remained after this, with increased action of the heart and arteries with augmented power, antimonial powder (together with calomel till the primæ viæ were cleared of bile) was prescribed; in other cases an eighth of a grain of tartarized antimony, eight drops of tincture of opium with half an ounce of aq. ammon. acetat. and the same quantity of water, were given every four hours. By these means I was enabled in most cases to cut short the disease; but in two or three instances it went on to the second stage. In two of those cases (one of which was accompanied with almost incessant diarrhœa) calomel appeared to produce the most beneficial effects; wine and brandy were given *freely*, (sometimes

(sometimes every hour) when required by the state of the pulse, &c. On the decline of the disease decoction of bark acidulated with sulphuric acid or infusion of quassia was given; and the men were taken out in a spring waggon for three or four hours in every day. *All my patients* are now convalescents, or have returned to their duty; except one man in whom the fever has become intermittent, as happened in the case of one of the non-commissioned officers.

No fresh cases have occurred since the 22d of February, and I trust the progress of the disease has been arrested. The hospital was fumigated with the mineral acid gases several times in a day; the wards in which there were men at the time, with muriatic acid gas; and the rooms which were at the moment empty, with oxygenated muriatic acid gas.

Cleanliness and the free admission of fresh air were insisted on.

The crowded barrack-rooms I had ventilated, so as to allow the impure air to escape without difficulty; and to secure a supply of air more fit for the purposes of respiration. The whole of the bedding was at my request exposed to the open air for several hours in the day.

It may be right to remark, that for some days after the last case of fever was admitted, several men were daily attacked with ophthalmia, which appeared to have been epidemic in the 18th and 53d regiments, which were a short time since stationed at Canterbury.

I am, &c.

EDWARD LUSCOMBE.

King's Barracks, Canterbury, March 2, 1805.

To the Editors of the Medical and Physical Journal.

Gentlemen,

THE latter part of the eighteenth century will be ever recorded as the æra, when medicine had arrived to such a perfection as entitles it to the highest rank among the other branches of philosophy, and reflects a lustre on British practitioners not to be equalled in all Europe. Within these few years our attention has been called to some of the greatest discoveries that ever adorned the healing art.

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The prospect of the annihilation of the small-pox: The wonderful effects that have been produced by the digitalis, not only in phthisis pulmonalis and confirmed dropsy, but in pneumonia and other diseases: The astonishing success that has attended the use of cold affusion in typhus, in tetanus, and other spasmodic diseases: The effects of the muriate of lime and barytes in that emphatically styled opprobrium medicorum, scrofula; all proclaim this.

But, perhaps, there is no circumstance in the Annals of Medicine that has excited more admiration in the profession, and caused more joy to individuals, than the cure of Gout. This Herculean disease has hitherto baffled all the attempts of physicians, not only to cure it, but even to alleviate its symptoms or protract its return; this was reserved for the present day, to join in the train of the other once opprobria medicorum, to crown the whole, and to give the name, "The Æra of Medicine."

But while we so justly admire the attempts that have lately been made by some of our own country, to throw new light upon the subject; amongst these, Mr. Mantal's paper in your extensively useful Journal for December last, deserves a high tribute of praise. None amongst your numerous Correspondents have ever taken up the subject, or discussed the merits of that excellent Treatise on Gout, and the use of the bark in that disease, written originally in Latin by Prof. Tavares, and which Dr. Adams has been so kind as to give us in English, through the medium of your Journal. The only reason I conclude of this neglect is, that we are too apt to overlook foreign publications, even of more enlightened countries than Portugal, seeing our own island stands so high in the medical world. And even here also I confess we have a proof of this; for although I can never sufficiently thank the Archiatros of Portugal and commend his treatise, yet I believe we shall find that one of our own countrymen, Dr. Kentish, in a treatise written about fourteen years since, will have the honour of priority in respect to his views of the nature of the disease, and of the use of the bark in the cure of it; but as it has been so amply confirmed by the Professor, both in his own case and in the cases of others, we are highly indebted to him; and if you will give me leave, I will add my testimony to the truth of it in my own case also.

As well as I can remember, the first attack I had of gout was in the instep, in the autumn of 1782, before I had reached my twenty-fifth year; there was no external inflammation,

inflammation, and very little pain except on moving, and in a few days it entirely left me. I felt nothing more of it till the month of July in the next year, when I was seized with a severe pain in the great toe of my right foot. The paroxysm, though severe, was very short; four or five days I believe put an end to it. Although I have little doubt that the disease is hereditary in me, yet I believe that at this time it was brought into action by certain causes, which would have produced gout in subjects where it was not so. Early disappointments, severe losses, with their attendants, anxiety, vexation and care, joined with the fatigue, watching and cold, to which medical men are subject, and producing a train of dyspeptic symptoms, are sufficient causes, without the aid of dissipation, to produce gout; but though I had from other motives than that of prevention, quitted my former mode of living very soon after this last paroxysm, yet, in the latter end of 1784, it returned, and continued as before. Thus it did four other years following, without affecting any other part than the feet, and without any material derangement of the system. In October, 1789, notwithstanding my regular mode of living, which I have continued ever since, it attacked the knee and right hand; and in January, 1791, after suffering much from the duties of my profession, I was seized with a most severe paroxysm, which affected almost every joint; this lasted a fortnight, and just as it was over, before I was able to quit my room, I was under the necessity of visiting a patient in a critical situation, which immediately brought on a relapse that confined me a fortnight longer. From this time, despairing of a remedy, I became dispirited, and was obliged to relinquish a considerable part of my practice. Till this time it was only once in the year that I should have an attack; but after this it would be more frequent, and almost every joint in rotation affected: and for these last ten years I know not how many paroxysms I have had in each year; but generally three more distinct than the others; one, as the rain sets in, in the autumn; another every year but the present since 1797, about the beginning of January; and the other in one of the rainy months in the spring. To such a sufferer, how welcome was the account which Prof. Tavares gave of the use of the bark, and which happily came to my hand before the autumnal paroxysm came on. This happened on Wednesday the 17th of October last, about ten days after the rain sat in, when, after several days indisposition, I was seized with a severe attack in the right shoulder; the pain increased towards night with

with great violence, and gave me every reason to expect a general attack. I passed a very painful night, and by the morning the pain extended to the elbow; it was now I determined to try the bark. From something I had eaten the day before I had two lax motions early in the morning, so that I judged any previous purgative unnecessary. My stomach was quite relieved, and I was well prepared for it. I began at ten o'clock on Thursday morning, and took two scruples only every two hours, or as often as my stomach would bear it, mixed with a few grains of pulv. arom. and two tea spoons full of brandy. I passed the night comfortably, and almost free from pain. The support and comfort I felt from the medicine rendered the use of wine and other stimuli, which I had been accustomed to take, almost unnecessary. I was so well on Friday as to conclude the whole was over; but in the afternoon the bark affected my bowels, and produced two or three evacuations; I was immediately seized in the hand, and it became severe. This I considered simply to arise from the bark losing its influence on the system by this unwished for effect. I then took about ten drops of laudanum with the next dose, and fifteen at night without the powder; this produced the desired effect. I suffered from my hand three hours pain only, and this much more tolerable than usual; and on Sunday a perfect crisis took place. I could not sufficiently express my feeling on the occasion, frequently saying with Gotfs. Held, "Cortex peruv. in podagra remedium est divinum;" and I thought

> "The joy half lost, because not sooner found."

I have reason to believe the attack would have been general, because for these last ten years I have scarcely ever been seized in the hand without suffering in every part, and because I felt, as it were, a faint impression of the pain in all those joints that were usually affected in the progress of the disease. In a few days I was able to quit my room; and on the 29th I was so well recovered as to visit a patient without suffering a relapse, as was generally the case; but this happened about a month after, and gave me a further and clearer proof of the efficacy of this remedy. The shoulder not having quite recovered its strength, and using it inadvertently, by a much greater exertion than usual I brought on the pain; and being obliged to go out the next day, (Wednesday, November 28) and suffering also from a blow on my knee, I was threatened with another severe paroxysm. On Saturday

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the pain left the shoulder, and threatened to attack the knee and feet. I instantly took a sufficient quantity of elect. sennæ, to produce two or three evacuations. On Sunday the pain seized the knee that had been bruised, and was rather severe; I then began the bark; and after taking only half an ounce, the pain and all the other symptoms left me entirely, and more completely than at first, which, I suppose, agreeably to Prof. Tavares, was owing to the previous laxative. From this time to the present day I have enjoyed better health than I have at this season for several years; and notwithstanding the winter has been unusually severe, and every arthritic in the neighbourhood confined by the disease, I have been able to go out at all times, being more bold than formerly, knowing the remedy is at hand. From this I think I might say, with a little variation, with Virgil,

> O fortunati . . . . . . bona si sua norînt
> Arthritici.

The remarks I have made are as follow:

The fit has always been made up of distinct paroxysms and remissions, and it has generally been ten days before any thing like a crisis has taken place. The usual paroxysms are about ten o'clock A. M. and seven P. M. The rigor, succeeding heat, and perspiration resemble more a fit of ague than any other disease. The attack has almost always been in the rain months. I consider it to be the offspring of debility, as abstinence and fatigue will invariably produce it in me; and the evening paroxysm is always lessened in proportion as I have been able to take some solid food at dinner. I found this so essential to me, that I have endeavoured to get an appetite by taking some wine, or spirits and water, about an hour before; and from not accustoming myself much to stimuli in health, I find the greatest benefit arise from their use in this particular during the whole gouty paroxysm. This being the case, I was more easily prevailed on to try the bark, especially as it has been given in some cases as food. I found it to be so in reality; and I am persuaded it may be taken in much larger doses if there be occasion. The cautions I observed were to guard against symptoms of indigestion on the one hand, and against its purgative effects on the other. Omitting it soon after meals and the last thing at night, and taking some aromatic tincture with it, prevented the one, and a few drops tinct. opii invariably prevented the other. I consider that regular good living, avoiding every thing that will occasion indirect debility, and as much exercise on horseback

horseback as can be taken without fatigue, avoiding suppers, and keeping early hours, the best methods of preventing a return of the paroxysm. I have observed, that after every fit, for these last ten years, I have been subject to a relapse twice or three times, or till the disease had worn itself out, or, more properly, till I had gained strength enough to resist it; how much this resembles ague! But this has not been the case now, as I was not so much weakened by its long continuance. Yet still there are not wanting those who oppose even this method of curing the disease. Apoplexy and hæmoptysis are held up as the dire effects. Since my remembrance, the cure of ague also was to be purchased at the great expence of liver complaints, dropsies, and obstructions of various kinds; but Prof. Tavares has been eight years a living proof to the contrary; and I look forward to the time when this prejudice will be so far removed as it is now in regard to ague.

From the attack invariably beginning with rigor and other symptoms of fever, and from the effects of the bark, I have considered the inflammation on the extremities as the effect of fever; in the same way as in the small-pox, measles, and other exanthemata, the eruption is generally in proportion to the fever, and our aim being principally directed to the cure of it by cold; might not a general exposure to cold air, on the first approach of the paroxysm, be of service in the gout also? Every one knows that very frequently a paroxysm of gout is preceded by symptoms resembling catarrh; and we have all heard of the case lately of the physician and his apprentice boy, who, by leaving his master's house, and lying in the street all night, was cured of a violent catarrh, with which the rest of the family were also affected. This led the Doctor to alter his mode of treating the complaint. Instead of nursing his family, keeping them hot, and sweating them, he exposed them to the air, and the happiest effects followed. I have also put this method into practice, both under my own roof and elsewhere, with similar success.

In speaking or writing on any disease, I would always observe this motto,

"De morbis nil nisi verum."

I am, &c.

Falmouth, Jan. 30, 1805. STEPHEN LOWRY, M. D.

To

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE melancholy case of gout, detailed by Mr. O'Neal in the last number of your Journal, forces from me some animadversions on the rash practice which was employed in it, and which, I hope, will be a warning to those who favour Dr. Kinglake's mode of treatment, how they persist in cold applications, heedless of the appearance of dangerous symptoms, until it is too late to reclaim their hasty measures. In justice indeed to Dr. Kinglake, I think the practice in this case was injudiciously carried much farther than he himself would have ventured upon; and that, in his remarks on the case, he pays too great a deference to Mr. O'Neal's opinion, in referring to apoplexy, symptoms, which every unbiassed practitioner will pronounce to have been repelled gout. Indeed, Gentlemen, you must pardon my surprize at your delay in publishing Mr. O'Neal's case (which is dated in September last), when cases of fortunate termination are immediately inserted in your Journal; and I shudder to think how many fatal cases may have unfortunately occurred from the indiscriminate application of cold, which an earlier insertion of this case might have prevented. I hope I am not mistaken, when I view in Mr. O'Neal a youthful enthusiast, laudably ardent in the cause of science and humanity, but whom experience hath not yet taught to adopt, with limitation and caution, such opinions and practices as run counter to the observation of many ages. If, with experience as yet necessarily limited from my years, I may be allowed to quote myself, I would mention that I formerly used, without the proper cautions so judiciously laid down by Dr. Currie, the cold treatment in fevers, of the good effects of which, under these restrictions, I am daily more convinced by farther trial; and have now only the consolation of believing, that although the cold was applied injudiciously and with bad effect, the cases were of such a type, and in such patients as would most probably, under any treatment, have terminated fatally. I too am an advocate for Dr. K's practice in a limited sense, and am far from taxing him, as Mr. Edlin (except he had produced some proof of his assertion) has uncandidly done, with giving fictitious cases; but I will say, that I view with distrust some of his narrations, as I would do those of every

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man who has attached himself strongly to a particular hypothesis; knowing how much a favourite opinion stands before and obscures the correct and dispassionate judgment of even the keenest observer. Many parts of his theory I profess I do not understand, and cannot therefore accede to. To some sentences in his work I can attach no meaning whatever. That cold is indicated, and may be safely applied in young robust subjects under the first paroxysms of gout, when the inflammation of the foot runs high, and where there has never been shown any atony or great derangement of the stomach, or other vital viscus, I must admit, and would give Dr. K. every credit for so far introducing this practice to public attention. I would also give it as my opinion, that thereby the paroxysm being shortened, the patient will perhaps be spared a long confinement, and the parts will be left in a less debilitated state, and with less disposition to a return of the disease, provided the proper general regimen be strictly pursued. But I think such cases are comparatively but few. Without disputing with the doctor about the diversity of the structure of parts, and the gouty inflammation being confined to those of a particular conformation, and letting others argue as they please about the existence and nature of gouty matter, and upon other points in dispute, which perhaps the present state of pathological knowledge, whatever it may afterwards become, will not yet permit us to solve; I would only request his attention to the following questions, and the serious inquiry of every practitioner into these and other phænomena of the disease, before they prevent it from wasting its accumulated influence on parts least essential to life. Are not most attacks of gout in the limbs, especially after the first or second, and when the patient's constitution has previously been impaired by the disease, preceded by more or less affection of the stomach, consisting generally in atony, impaired digestion, and disturbed action of the chylopoetic organs and consequent derangement of the whole system, which symptoms are relieved or disappear on one or more of the joints becoming affected with the gouty inflammation? Does not this inflammation sometimes suddenly disappear, and a train of alarming symptoms immediately ensue; either in the head, and consisting of coma, and a loss of sensation and motion; or, as most frequently happens, in the stomach, indicated by a torpor, or even total suspension of the powers of that organ, which if it continues for any time terminates in death? Is not this fatal retrocession often

often the effect of cold and other repellents (I use these terms in a general sense, as convenient, without wishing to involve any particular theory) injudiciously applied soon after the gouty inflammation has appeared, or before it seems disposed to fix itself, and is yet flying from joint to joint? If these alarming symptoms have not proceeded far, and are combated in time, do they not cease on the re-appearance of the inflammation, or swelling externally? Have we not all heard patients themselves, people unbiassed by hypothesis, in an early stage of the paroxysm, and while the pains were yet flying about, declare, that if by chance they exposed an arm or leg for any time to the cold air, they immediately felt an uneasy sensation and *sinking* at the stomach? When indisputable cases of the most unfortunate sequel occur, are even numberless cases terminating favourably to warrant more than a very guarded practice? Was not the disease in the unfortunate case under consideration, successively driven from the extremity to the stomach and head by the means employed? And might not a valuable officer have been saved to his country, by allowing the inflammation to fix in the foot, as it seemed disposed, and by moderately indulging the salutary craving of nature to support the tone of the stomach?

March 5, 1805. R. S.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE narrative of Mr. Mace's case, detailed in the last number of your Journal, by Messrs. Scott and Taynton, is replete with valuable information on the refrigerant treatment of gout. In this case, irregular symptoms arose in the practice highly worthy of comment.

The diversity of the human temperament is so vastly extensive, with respect to the motive powers of life, that it is but natural to expect in the same general disease much occasional variation from the common standard, both in the mode of the affection, and in the influence of the means which might be instituted for its cure. A marked peculiarity presents in the constitutional manner in which gouty inflammation had uniformly affected the patient al-

luded to. It is asserted, that in all former instances or the disease, and when the cooling treatment was not employed, the same chain of morbid irritation prevailed. This diseased state of sympathetic action seems, by long continuance, to have acquired a fixed establishment, not readily to be subdued by the prompt removal of the local excitement, which appears to have produced it. No uneasiness is stated to have disturbed any of the visceral parts previously to the appearance of inflammatory gout on the joints, either in the recent instances under consideration, or on any former occasion; it is therefore fair to infer, that this affection must have been solely symptomatic of the local pain; nor does the circumstance of visceral disease remaining after the removal of the local pain, at all militate against this conclusion.

Morbid actions, however generated, or however linked by sympathetic connection, neither arise nor cease at the same time throughout their whole extent, but begin, increase, diminish, and terminate by portions. Thus, a locked-jaw, resulting from a punctured ligament or tendon, does not cease with the discontinuance of the local torture which induced it. The wound which caused the spasmodic affection may (as the source or first link in the chain of morbid excitement) be healed, yet the diseased state of motive power, pervading the intermediate parts from the seat of grievance to the muscular structure of the jaw, might still remain, and exert with undiminished force its noxious influence.

If habitual gout in any joint should engender diseased sympathy with the visceral organs, the menacing effect of the association will be liable to be shewn in symptoms of reciprocal disorder. This consideration furnishes the most cogent argument for promptly subduing the local disease, lest its protracted existence should open and eventually establish a hazardous state of morbid intercourse with parts more immediately essential to vitality.

The train of morbid evil that constitutes sympathetic ailment in the animal economy is not curable, or even safely transferable, by encouraging and sustaining it on any portion of the disordered parts. The intimate connection, the continuity indeed subsisting between all the parts which may be associated in sympathetic disease, must necessarily render every point of its extent subject to be influenced by an impression made on any portion of it; hence the dangerous tendency of fostering one disease, with a view to the removal of another, and the culpable

neglect

neglect of indulging inflammatory excitement, or gout, on the joints, in the delusive hope of either expelling or obviating visceral disease by its *stationed* agency.

Though no difficulty occurs in assigning a rational cause for the peculiar organic affection, which attended Mr. Mace's case, during both its natural progress and the refrigerant treatment, yet it was highly important to a correct knowledge of it, that its reporters should have precisely stated the motive condition of the vascular system during the disease, whether the pulse had been much accelerated, invigorated, or enfeebled. If the arterial action should have been much excited, (as is not unusual in gouty affection) was it strictly compatable with the refrigerant treatment locally adopted, to stimulate the system by cordial medicine? The sensations of acute pain in the head and stomach, may be justly supposed to have irritated the powers of life too much of themselves, without the farther aid of medicinal excitement. It is not my wish to suggest the slightest disapprobation to a practice which appears to have been directed by *exemplary candour* and *humanity*, but merely to point out the propriety of combating all occurring symptoms, according to their seeming nature. Thus, if violent pain were to occur in either the head, stomach, or any other vital organ, during the refrigerant treatment of gout, it surely would not be strictly consistent with the intention of cure to aggravate the excessive irritation by additional excitement. On the contrary, if a faultering weak pulse should present with spasmodic twitches fleeting through the frame, and either a general or partial sense of deficient heat, it would be advisable to sustain, by the judicious use of stimulant agents, the declining energies of life, until the salutary balance of motive power might be reinstated.

The reporters of Mr. Mace's case will hereafter have to direct their best judgment to the most effectual means of destroying the morbid association, which seems to be established between the inflammatory affection of the joints and the irritation of the viscera. In doing this, they will indeed have to cope with one of the principal evils of prolonged gout, but will probably have nothing to risk if they guide their practice by both the local and general indication of prevailing temperature. The prompt removal of pain would be also preferable to its gradual decline, which may be considered as rather an actual though imperceptible extension of it to such parts as hap-

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pen to be most susceptible of morbid excitement, than its complete annihilation.

The refrigerant treatment of gout is now conducted by either sudden immersion or affusion of the affected parts in cold water, unremittedly continued, until all sense of painful heat be subdued. This decisive mode of practice expedites the salutary efficacy of the treatment, by at once extinguishing the inflammatory heat, and preventing its noxiously stimulant effects being propagated to the system. Instances are now in my possession, and soon will be published, of patients keeping the affected parts in a deep vessel of water for upwards of an hour at a time, and recurring to it with equal duration on the least return of pain. In this way effectual relief has been obtained without in the slightest manner affecting the general health.

It should not for a moment be forgotten, that gout is a disease of excessive temperature, that it is of local origin, and that its sympathetic influence on the system should be likewise treated according to the existing circumstances of heat or excitement; if redundant, it should be diminished; if deficient, supplied. Gout thus managed may, with all its *anomalies*, be confidently encountered; and will be found, even in its most inveterate and difficult forms, safely and efficaciously remediable by the refrigerant mode of treatment.

Your correspondent Mr. Mantal has, in his remarks on Mr. Edlin's account of Mr. Baker's case in your last Journal, exhibited an *unprejudiced* and an *enlightened* view of the nature of gout. He has very judiciously explained the way in which motive irregularity may morbidly affect the healthful conditions of life, and has (as more largely illustrated in my Dissertation on Gout) evinced the propriety of treating gouty inflammation, in both its original attack and sympathetic extension, as a disease of temperature, withholding and adding excitement according to the prevailing sensations of either heat or cold.

My opinion of the nature and cure of gout does not essentially differ from that of your ingenious Correspondent; his intelligent observations therefore on the subject, cannot fail further to elucidate the cooling treatment of that disease.

The want of liberality in Mr. Edlin's statement of Mr. Baker's case, unwillingly compelled me to suspect the purity of his motive in ushering it into public notice, to dispute its credibility, and to offer objections to the conclusion attempted to be deduced from it.

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The umpirage of the controversy now rests with the Public. Mr. Edlin's Case and my Reply to it are both submitted to that high arbitration, the decision of which, and the accumulating evidence of farther experience, must sooner or later irrefragably determine the truth of the question. I am, &c.

Taunton, Feb. 12, 1805. ROBERT KINGLAKE.

CRITICAL ANALYSIS
OF THE
RECENT PUBLICATIONS
ON THE
DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

Observations on Cancer, connected with Histories of the Disease. By EVERARD HOME, Esq. F. R. S. Surgeon to St. George's Hospital. London. 8vo. pp. 248

IN an Introduction the author obeserves, that, notwithstanding the destructive nature of cancer, it still remains not only an incurable, but a disease not well defined. This is certainly most deplorably true, and it is with much pleasure we find the subject at last seriously taken up by regular practitioners.

The late Mr. Justamond led the way with a zeal which was supported by sanguine hopes of discovering a cure. Though in this he failed, he has very much served the cause in which he engaged, by a candid acknowledgement of his failure, and an accurate history of the manner in which he gave so many remedies a fair trial. Mr. Pierson followed with "Practical Remarks on Cancer," which, like all that Gentleman's writings, contain a large collection of authorities as well as many useful remarks. Dr. Adams, in his "Observations on Cancerous Breasts," has assumed the bolder task of forming a theory, or at least, a division, of the different species of cancer to which those glands are liable. To what extent he has succeeded cannot easily be ascertained, till we have a much larger accumulation of facts than the present state of the science furnishes. We must, however, allow him the credit of having stimulated the industry of others. To his publication we probably owe Mr. Abernethy's attempt at a classification of tumours, and also the work now before us.

Mr. Home, after regretting that so little has been done towards an accurate investigation of this most painful and fatal malady, goes on to remark, that the most rational mode of diffusing the necessary knowledge is, that each practitioner should

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lay the result of his inquiries before the public, in order to form a fund of accurate observations. Perhaps this is the best means that can be proposed, considering those jealousies which must ever exist among men engaged in the same pursuit. But there cannot be a doubt, that if mutual communications were made to each other, and mutual opportunities offered of seeing each other's cases, a much more correct knowledge would be formed; and every work, before it met the public eye, would acquire a degree of accuracy we cannot otherwise expect. Till this desirable event is accomplished, we shall receive with pleasure, and review with candour, every contribution, however imperfect, on this important subject.

Chapter I. contains two "Cases of Cancer, the Origin of which was ascertained." The first subject was a sailor, who four years before his admission into the hospital, by a fall from the main-mast, had reduced the glans penis to a perfectly flat figure. By rest and proper treatment the part recovered its natural form, excepting a small pimple on the extremity, which, six months afterwards, became a painful ulcer.—The symptoms increased, and were further exasperated by a mercurial course. For two months afterwards a variety of remedies were tried in the Lock Hospital, during which the disease gradually gained ground, till he was received into St. George's Hospital by Mr. Home. "At this time, we are told, the glans penis had the appearance of a cancerous tumour, with a small deep ulceration in the anterior part of it; and all round a tuberculated margin forming a thick ridge, partly covered with a thin cuticle, which the author adds, is an appearance I consider as peculiar to cancer." Arsenical remedies were exhibited in poultice, and internally; but with no advantage. The disease continued to increase under every mode of treatment, till the groins partook of the ulceration, fungus, and occasional hæmorrhage; the lower limbs were œdematous; hectic sometimes supervened; the pain and extent of the disease were only arrested in one part, to spread with more rapidity in another; and, in the end, the patient died miserably.

"On opening into the cavity of the abdomen, the peritoneum, which lines the abdominal muscles between the pubes and the navel, was studded over with small white opake bodies, of a firm consistence. Immediately within the abdominal ring, the lymphatic glands were in a diseased state: on the left side there were two of the size of chesnuts; and on the right there were three of the same size: a chain of diseased glands, of different sizes, was traced from these round the margin of the pelvis to the lumbar vertebræ. On the anterior surface of these bones they formed a solid mass, an inch and a half in thickness, completely surrounding the aorta and vena cava. They were met with as high as the sixth dorsal vertebræ, gradually diminishing in size and number to that part; but none could be discovered on the anterior part of the spine, higher up.

"There

"There was a large cluster of similarly diseased glands at the root of the mesentery, and a few were met with in the mesentery.

"The psoas muscle of the left side, in which the diseased glands were in the greatest number, was studded over by small oval white bodies of a firm consistence, not much larger than millet seed, the interstices between them not exceeding one-eighth of an inch. On cutting into the substances of the muscle, the interstices between the fasciculi of muscular fibres contained a number of the same substances: they appeared to be evidently connected with the diseased state of the lymphatic system.

"These glands, when cut open, presented different appearances; those nearest the groins contained a soft white substance, of the consistence of thick cream; and those higher up in the loins were harder and more solid.

"The liver was studded over on both its surfaces with flattened hard irregular bodies of different sizes, from that of a silver penny to that of a shilling; their internal substance, when cut into, was similar to that found in the glands above described,

"The other viscera contained in the cavity of the abdomen, had their natural appearance.

"Upon examining the thorax, the lungs were found in a healthy state; the heart was rather smaller than it is usually met with. On the anterior part of the diaphragm there were several tumours of the size of chesnuts; and on different parts of the pleura, in both sides of the chest, smaller tumours were met with; all of these resembled, in their internal texture, the diseased glands in the loins.

"I have two cases of cancer of the penis now under my care, the progress of which is very similar to that above described. In both of these the disease began in the prepuce, and extended itself to the glans, which is by far the more common origin of the disease. Mr. Hey (in his Practical Obervations in Surgery, illustrated with Cases) has given so many accurate histories of cancer of the penis, arising from this cause, as to make any addition to them superfluous."

On this important case we shall make no remarks, but that, in the description of the appearances after death, we confess we expected from Mr. Home a more accurate account of these tumours. In some places we read of tumours, in others of diseased glands, and, lastly, we are told that the tumours resembled the diseased glands. Now we shall be glad to be informed, what proofs there are that any of them were glands, or that they were not all such? Among the old physiologists, it was customary to call every appearance of this kind a gland; but our readers will see, that if a gland is so much altered as to become a tumour containing a soft white substance of the consistence of thick cream, it will be difficult to say what the original structure may have been, or whether the whole were new-formed parts.

The

The second case was in the foot, and either arose from, or was first discovered in consequence of, wearing a tight shoe. The mischief continuing to increase for a great length of time, the limb was at length amputated. Though the diseased action had extended to all the surrounding parts, it does not appear that the glands were affected. The tumour is said to have "the striated texture which characterizes the disease." We sincerely wish to have been informed, whether by *the disease* is here meant cancer. We acknowledge there are often tumours of such a description as are not easily described; but in that case, we wish the account not to be so entirely unembarassed.

Chapter II. contains cases of tumours in the breast, which were indolent in their origin, and became afterwards true cancers. The three first cases were removed during their indolent state. But the author conjectures they might have proved cancerous by the result of the three following ones. The similarity is not easily ascertained. However, those who wish to compare them with each other, and with cases which have occurred in their own practice, must consult the work itself.

Chapter III. contains "Cases of Cancer of the Breast, which illustrate many of the Symptoms of the Disease." The first was the effect of a blow at the early age of fifteen. The author had not an opportunity of seeing the conclusion of the case, but we regret much that he has given no description of the tumour after it was removed.

The inference we should draw from the next case would be, that whenever the operation is performed, it is best to remove the whole breast; and where the glands of the axilla show the disease, to remove also as much of them as the knife can reach. This woman submitted to the operation four times. The texture of the first tumour is not described.

We have next a case of cancer in the breast, in which the lymphatic glands towards the clavicle were the only ones contaminated. This affords no practical remarks, as the patient is still living, and none of the diseased parts has been removed by art.

The following case is of cancer in the breast attended with swelling in the arm, from the effects of the disease on the glands in the axilla. These cases are very common; but we could wish, that before this time, the nature of this swelling in the arm were better understood. We well know that the lymphatic glands and vessels are so universally diffused, and anastomose so universally, as to keep up absorption after the destruction of many of them.

In the next case the swelling of the arm did not take place till after the operation, and by its increase produced so much pain as to terminate the life of the patient. It appears that the disease had extended to the ribs and muscles of the chest.

The next case affords no practical hints, excepting that it spread (as the author supposes by the glands) towards the sternum.

In the following case, however, small tumours were produced

over

over a considerable part of the body by the contamination of the skin.

In the sixteenth case a tumour was extirpated, and during the healing process the skin appeared contaminated; but by destroying the parts the patient continued free from the disease. We have no account of the tumour taken out.

In the succeeding case the disease had affected the pectoral muscle before the operation was performed. Afterwards an appearance followed, which very much resembled that disease so well described by Mr. Hays under the name of Fungus Hæmatodes. We have again to regret that no account is given of the appearance of the tumour first extirpated.

In the eighteenth case the disease extended over the lungs in such a degree as to prove fatal. Tumours of different kinds were found, which the author considers as the lymphatic glands of the lungs.

In the nineteenth case considerable inflammation attended the disease in consequence of a journey. In the event, it appeared that this inflammation was not cancerous.

The twentieth case was attended with pain and swelling in the arm, without any apparent disease in the axillary glands. This should at least teach us to doubt whether swellings of this kind are ever occasioned by obstructions in these glands.

In the succeeding case the principal pain experienced by the patient was found by the operation to arise from the pressure of the tumour on the nerve; a similar instance is related in an abscess by the knee.

A case follows, in which the cancerous tumour mortified and was cast off, but the local disease afterwards spread, and other parts about the body began to mortify.

The succeeding case contains nothing but what often occurs.

The next Chapter contains two cases of Hydatids in the Breast. The first, Mr. Home supposes arose from blood originally effused and coagulated. Being afterwards absorbed, the surrounding parts were too compact to collapse and fill up the space, in consequence of which a watery fluid was deposited. This, it is added, is *exactly* similar to what happens in the brain. We would gladly know how our author acquired this *exact* information? From this and the succeeding case, and also from the frequent occurrence of these cysts in cancerous breasts, Mr. Home very rationally supposes that hydatids are not necessary to the existence of cancer, but accidentally found in those tumours. This appears to be Dr. Adams's opinion of what he calls the lymphatic hydatid, or watery incysted tumour.

Two cases follow of cancerous tongues, which proved fatal without any operation. In the section of one of them after death, immediately under the coronal process of the lower jaw was situated a hard and conspicuous tumour, which, on examination, appeared to be a gland weighing two ounces and a half, measuring an inch

inch in thickness, and a trifle more in diameter. We much regret that we are not instructed how we are to distinguish what are really glands in this altered state. The thyroid gland was diseased, but we are not informed whether it had the same appearance as the enlarged one above-mentioned.

A Chapter follows of cases, which illustrate the symptoms of cancer in the testicle. These cases are all valuable, and the description of the original tumour in all, and in most of those in other parts of the body after death, are given, we doubt not, with accuracy, but not with sufficient minuteness. In one case we have an account of the greater part of the body being filled with diseased lymphatic glands. On cutting into them, it was found that "those which had not arrived at suppuration contained a substance, not unlike soft cream cheese; those further advanced, appeared to be only a bag containing a whitish matter tinged with blood, and some nearer the pubes consisted of a white thin matter like cream with no tinge of red whatsoever." In another case, the diseased part, which was removed, consisted only of a thickened tunica vaginalis filled with firm coagulum. On examining the body after death, there were found large masses of swellings, not much firmer than strong coagulated milk with the whey in it. These masses extended up the left side along the back; on the epiploon was a large mass connecting the colon, stomach, and other viscera together. The liver was studded with similar tumours. We presume they were enclosed in some sac, but that is not described. There seems to have been no suspicion that these were lymphatic glands.

Two cases follow of cancer in the rectum, from which, and the author's observations on other cases of cancerous intestines, he remarks that he has never found the absorbents affected from these causes. This would lead us to suspect that such diseases are essentially different, though equally incurable. Some good practical remarks follow.

We have next two cases of the disease which Mr. Hunter called a fungated sore. As amputation of the limb was performed in both, it is to be regretted that no account is given of the appearances of the limb.

A long Chapter follows "on the Nature and Progress of Cancer," which is as full of alternate description, conjecture, proposals, and caution, as are usually met with in most authors on this subject. Some remarks succeed on the different modes of extirpating cancers, in which the author shows that the actual cautery is by no means so formidable as it appears to be. He however prefers the knife on most occasions, and offers some useful remarks on the mode of extirpating cancerous tumours from the breast by that instrument. The paper read before the Royal Society on the extirpation of tumours from the tongue by ligature is somewhat enlarged; and the work closes with remarks on the mode of extirpating by the knife, cancerous parts in the testicle, skin, and other places.

Such

Such is the nature of this work, of which we have given a very ample detail. The subject is highly important, and the advantages Mr. Home has enjoyed in so long a communication with Mr. Hunter, induced us to expect much information from him. If we have been disappointed, we impute it rather to the intricacy of the subject than any deficiency of ability or industry in the author.

A concise and systematic Account of a painful Affection of the Nerves of the Face; commonly called Tic Douloureux. By S. FOTHERGILL, M. D. *Physician to the Western Dispensary.* 12mo. pp. 105.

THE *Tic Douloureux, Trismus Dolorificus* of Sauvage, or, as the author of the Treatise before us terms it with more accuracy, *Faciei Morbus Nervorum Crucians,* is perhaps the most painful chronic complaint with which we are acquainted; and though comparatively rare, practitioners have every now and then the misfortune to meet with it, and to deplore the intense sufferings of the patient, and the lamentable inefficacy of the common resources of art.

The written descriptions of this disease are few and of modern date. Dr. Fothergill, uncle to the author of the present treatise, was the first who distinctly brought it into notice in England; since which time a more detailed and laboured history of the disease has been published in France, by M. Pujol, entitled, *Essai sur la Maladie de la Face*; a learned paper with comments on Pujol, by Thouret, inserted in the Mem. de la Societé Royale de Medicine; a few detached remarks on the subject, with cases, in some foreign Journals; and lastly, but certainly one of the highest in value, Dr. Haighton's succinct comprehensive paper, inserted in the Medical Records and Researches, containing also the proposed plan of cure by division of the nerve.

From these authorities, and, as appears, from some personal experience, Dr. F. has drawn up, with judgment and fidelity, the present monographic description.

The several ramifications of the second branch of the fifth pair of nerves are the chief parts affected by this terrible disease. The author's more detailed description is the following.

" The most frequent seat of the affection, is the nerves over the os malæ, just below the orbit; the ala nasi, upper lip, teeth, and gums. When this is the case, it will be found to proceed from the second branch of the fifth pair of nerves, the *superior maxillary nerve,* which passes through the foramen rotundum, and whose branches are chiefly distributed to those parts. Sometimes the forehead and temple, and inner canthus of the eye, and even the globe of the eye itself, are first affected, from the first branch of the fifth pair, the ophthalmic branch being the subject of the disease; and as there are some cases recorded in which the patient suffered much from an effusion of scalding tears, it might probably arise from that branch of the ophthalmic, which goes to the lachrymal gland, being affected. The two other chief branches of the ophthalmic

thalmic, which are, however, very rarely the seat of this affection, are the frontal and the nasal; the first of which is distributed to the muscles surrounding the eye, and the muscles and integuments of the forehead; whilst the nasal branch passes obliquely through the orbit, giving off one or two twigs to the fasciculi of the ciliary nerves; and then is continued betwixt the superior oblique and adductor muscles, passes through the internal orbital foramen; and, after again entering the skull, passes once more out of the cranium through the cribriform plate of the ethmoid bone, to be finally distributed to the superior spongy bones, and frontal sinuses: when, in addition to the parts already named, the lower jaw and tongue are affected, the third branch of the fifth pair, or lower maxillary nerve, is diseased. Perhaps, as frequently as any of these nerves, is the portio dura of the seventh pair diseased; it gives off branches to most parts of the face, and, from its spreading, is named pes anserinus. Its branches communicate with several of those of the fifth pair. The distinguishing mark of its being affected is, that besides the parts already enumerated, we find pain in the ear, the mastoid psocess, and the angle of the lower jaw. The disease then is chiefly confined to the fifth pair of nerves, of which most frequently the second branch only is affected, and the branches of the portio dura of the seventh pair. But, from the intimate connexion of most of the branches of these nerves with each other, the disease seldom continues long without extending its ravages; and, as there are communications more or less intimate between, I believe all the first seven pair of nerves, which are distributed to every part of the head and face; it is just to suppose that, in very inveterate cases, all the nerves may be affected."

The description of this disease is necessarily defective in two great points, the predisposing and the proximate causes, for since the indefensible hypothesis (or rather only conjecture) of the celebrated Dr. Fothergill of a cancerous acrimony, not a plausible opinion of the cause has been advanced. The author does not add to the number of conjectures, but indulges himself in some very trite invectives against speculative reasoning and futile hypothesis on medical subjects, which, with singular infelicity of observation, he asserts to be the peculiar folly of the present day; an assertion which the least insight into the history of medical opinions would shew to be utterly void of foundation.

The diagnosis is important, not so much to insure the right treatment of this disease (as unfortunately it baffles every resource of medicine) as to prevent the patient from undergoing the additional pain and trouble of the remedies used in the disorders with which it may be confounded.

The most vexatious of these mistakes is for the tooth-ach, as it leads the practitioner to propose, and the patient to suffer (for he will generally submit to any thing in this excruciating disorder) the loss of many sound teeth with no benefit whatever. We shall transcribe part of the author's diagnosis.

"From

" From odontalgia, then, it is known by the age of the patient; the morbus crucians seldom appearing before that period of life when the tooth-ach is least prevalent, and when there are often very few teeth remaining. But what is chiefly to be relied upon, and which peculiarly distinguishes it from all other affections, is the shortness of the paroxysm,* and the rapidity of its succession; and during the interval, an entire freedom from all pain; the seat of the pain, and its darting in several directions, according to the particular nerve affected, with an acuteness and poignancy differing from that of the tooth-ach, which seems to strike deep, whilst the pain of the morbus crucians is always more superficial, and infinitely more lancinating; and lastly, the convulsive twitchings, which, though not always present, are very frequent, and are never experienced in odontalgia.

" From rheumatism it is distinguished by a paroxysm being excited by the slightest touch; by the shortness of its duration, and the extreme violence of the pain: neither are the symptoms similar; for in rheumatism, if acute, there is general fever, redness and increased heat in the affected part, and generally swelling; if chronic, the pain is dull, obtuse, long continued, and often increased at night; but none of these symptoms occur in the morbus crucians. When rheumatism and tooth-ach are combined, the symptoms are equally distinct. In such cases there is rarely an interval of ease, and the night is generally the period when the pain is most troublesome.

" From syphilitic pains, the disease is readily known by their history; their great alleviation during the day; their increased violence when warm in bed; and by their uniformly yielding to the use of mercury.

" From gout, the morbus crucians is easily distinguished, by the patient passing in a moment from perfect ease to the utmost torture, which again as suddenly ceases; and there are many symptoms in gout, that are not present in the disease we are treating of: indeed, I only know of one in common with both, and that is pain; but even this differs sufficiently, to prevent the least difficulty in discriminating between the two diseases."

The painful disease termed *hemicrania* appears to be more of a rheumatic nature, though nosological writers are not quite agreed as to its symptoms. If hemicrania be considered simply as an intermitting rheumatic pain of the face, the tic douloureux, which resembles it in many particulars, may be clearly distinguished by the circumstance of the pain, in the latter disease, accurately following the ramifications of the affected nerve; so that, as Dr. Haighton has well observed

" An unintelligent patient will frequently describe the dartings of pain so minutely, as to teach the practitioner the distribution of the several branches of the fifth pair, if he had not known it before."

Under the prognosis, Dr. F. introduces some good practical observations by Dr. Curry, Physician to Guy's Hospital.

In a well-marked case, here given on the authority of the late Dr. Cappe, of York, the following curious fact is added, shewing the power of fixed attention of the mind on a favourite object (independent of any sudden or energetic impression) to overcome a most acute bodily pain.

"A singular circumstance attending this patient, was, that when the pain was very intense, if he resolutely sat down to play at whist, a game of which he was particularly fond, the pain would generally cease, before he had played a single rubber; and whilst his attention was completely absorbed in the game, not another paroxysm occurred.

"This happened too often to be considered as accidental."

Little is to be added, on the subject of the treatment of this disease, to the observations contained in Dr. Haighton's paper. The operation of dividing the nerve is fully justified by the extreme acuteness of the disorder, and by the considerable degree of success that has attended this mode of cure. It is well known that this operation, though a radical cure in the part immediately affected, does not always prevent a recurrence of the pain in collateral branches of the nerves.

How far the pain may be safely followed up by the knife, and when it would be prudent to change the exterminating for the palliative plan of treatment, is yet doubtful, and must besides be determined by the circumstances of the individual case.

The Popular Compendium of Anatomy, or, a concise and clear Description of the Human Body, with the Physiology, or Natural History of the various Actions and Functions of its different Organs and Parts; containing also an Article on suspended Animation, with the proper Means to be used for the Recovery of drowned Persons. By WILLIAM BURKE, Surgeon. 12mo. pp. 261. London, 1804.

As much real knowledge in Anatomy and Physiology as the student will acquire, and as much curiosity as will be excited in the general reader, by the perusal of any brief compendium assisted by two or three minute engravings, may be fairly expected from a selection like the one before us, correct, sufficiently well distributed, intelligible, and in all respects very much to the purpose. An analysis of its contents would be idle, the following will serve as a specimen.

"Amphibious animals can live long without respiring; they exhibit a less complicated system for the function, they have no ribs, no diaphragm, no chest in fact. The respiration of frogs will illustrate this; they breathe through the nostrils, and distend their throat with air; the muscles of the throat force it into the lungs, which are emptied by a slight motion of the sides of the creature. So that they swallow the air by their broad extended jaws, and come to the surface of the water to procure it only occasionally.

"The

"The lungs in these animals, and in lizards, the camelion, and even the crocodile, who all breathe in the same manner with the frog, are thin, delicate, transparent bags, with but few arteries and veins distributed upon them; which is the reason that they require the influence of the air in a slender degree only.

"Fishes again have a mode of respiration peculiar to themselves. They breathe air when mixed with water, and this office is performed by their gills. These are formed by tender membranous fringes, through every part of which the blood circulates. They are protected by broad flaps, which move, as it were, upon hinges. These fringes are separated when the fish opens its mouth and drives the water backwards by a motion of its jaws, so that it is forced between each feathery extremity of the red gills. Here the blood is exposed to the water and the air which is dissolved in it; for fishes can no more live in water deprived of its air by boiling, or by an air-pump, than man or quadrupeds can live in a vacuum. If put into such water, they rise to the surface and gasp for air. Fishes cannot breathe in air alone, for that element is not accommodated to the mechanism of their lungs.

"The breathing of fishes unfits water for that function, as air is corrupted by the respiration of man; if we separate the air from the water in which fishes have lived, it is no longer the same air it previously was, and it is contaminated precisely in the same way as air is which has been respired by man. Hence it is that fishes when confined in a small vessel rise to the surface, and that in frozen ponds they crowd around the holes which are made in the ice. Even shell-fish have a sort of gills for the performance of this function; and the beard of the oyster is a curious and admirable example of their structure.

"The last species of animal respiration we shall notice is that of insects. They have no breathing organ like the lungs, but their bodies are pierced with air tubes in every direction. They divide very minutely like the delicate vessels of leaves and flowers, and penetrate every part of the animal; but the objects are so small, and the changes of form which insects assume are so rapid, that we cannot point out all the uses of this peculiar structure."

Mr. Wilkinson's Elements of Galvanism.

(Concluded from pp. 82—87.)

A detailed Journal of Galvanism, collected with much more industry than arrangement, is not a subject for analysis. The discovery of the voltaic pile opens the second volume; and the vast mass of experiments to which this beautiful fact in natural philosophy has given rise, are detailed with sufficient minuteness. The author is known to possess a very extensive apparatus of Galvanic troughs; and the extreme brilliancy of many of the experiments which it enables him to perform, has been witnessed by numerous spectators. The deflagration of metals is attended with peculiarly

liarly beautiful appearances, and on this subject the author gives the following remarks:

"I have been given to understand, that it was with the celebrated electrical apparatus at Haerlem, made by Mr. Cuthbertson, that the beautiful metallic oxyds were first struck upon paper, each of the metals having produced its peculiar characteristic tint.

"A powerful charge of electricity oxydates a considerable length of metallic wire; while galvanism acts on successive portions of the metal, whenever it is excited by a conducting medium. Electricity produces all its effects by one sudden and violent discharge; while galvanism operates by its continual current. It is on this account, that the sensations produced by their diverse actions, are materially different. The electric shock, from a very small jar, operates on the body by a sudden and percussive effect; while the one which follows the galvanic process, seems to arise from a constant current, attended by a jarring and tremulous sensation.

"All finely drawn metallic wires are rapidly burned by means of a large galvanic battery, the powers of which are in general ascertainable by the extent of fine steel wire, such as the pendulum springs of watches, which the battery will instantly render red-hot. This constitutes the most correct *galvanometer;* while the other, on which I have already touched, ought to be termed a *galvanascope.* A powerful battery, such as the one I generally employ, will induce a red heat on several inches of the above steel wire; and in this way I am enabled to ascertain whether my battery is in proper order.

"To deflagrate finely laminated metals, good charcoal is the best medium which can be employed. As the substance of the metallic leaves, when laminated, is much thinner than that of any wires which can be drawn, the deflagrations are more brilliant, and the light extremely vivid. Some metals exhibit a different appearance from others.

"Gold leaf, having the thickness of the $\frac{1}{232000}$ part of an inch only, is not merely deflagrated, but is likewise completely oxydated, and reduced to a purple powder.

"Silver leaf, which is thicker than gold leaf in the proportion of 7 to 4, is likewise converted into an oxyd, and exhibits a beautiful greenish light. We thus see, that by the powers of galvanic electricity two metals, which resist the utmost force of our most powerful furnaces, are rapidly oxydated.

Copper leaf, or, to speak more correctly, brass leaf, being the yellow Dutch metal made from copper plates, by cementation with calamine without a subsequent fusion, has a thickness nearly five times greater than that of gold leaf. In its deflagration, red ignited particles of copper are detached, on this account, that copper requiring a very high temperature before it fuses, the ignition takes place first. The copper, before it melts, is constantly red-hot,

red-hot, which is not the case with tin, lead, &c. The Dutch silver leaf, a composition of tin and zinc, about ten times as thick as gold leaf, is deflagrated with rapidity.

"Tin-foil, which is also a composition of tin and zinc, is about 300 times thicker than gold leaf. Narrow slips of this substance are also easily deflagrated. In short, all metals, if in a due state of tenuity, are capable of being deflagrated.

"When metals are placed under an exhausted receiver, they give out light, but are not oxydated.

"When metallic leaves are deflagrated in carbonic acid gas, the light is not vivid; but in oxygen gas, the contact is no sooner established, than the metallic leaves are destroyed with one sudden flash.

"Brugnatelli has conjectured, that the action of galvanism, in the decomposition of water, produces a compound which he apprehends to result from the union of the disengaged electricity with the oxygen, and which he terms an electrat. This electrat is capable of dissolving metallic substances. Thus, with copper, it forms a beautiful green; with zinc, a dark grey; and with iron, a reddish yellow oxyd. These effects, as I have already observed, appear to arise from the combination of nitrous acid and ammonia. They are probably produced in every galvanic decomposition of water.

"Van Marum, in making the circuit through quicksilver, noticed a beautiful effect. The end of a fine wire having been made to form the communication, a powerful combustion ensued, which dispersed the mercury on all sides, and sparkles, having the appearance of thousands of rays, constituting fine suns of several inches in diameter, were produced."

The author then attempts, by reasoning and by some experiments, to invalidate Dr. Crawford's theory of respiration and animal heat, and even to shew that respiration is not the cause of animal heat. The imperfections of Dr. Crawford's hypothesis, and the valid objections to which some of his experiments are liable, are well known to those who have attended to this branch of chemical physiology; but it is not by such inconclusive arguments and unsatisfactory experiments as the author brings forward, that the system of Crawford and Jurin will be overturned.

A few remarks are added on the medical powers of galvanism. As these are given without parade and exaggeration, and with all the appearance of candour and fidelity, we shall extract a few of them. The following relate generally to the application of galvanism.

"In a case of hemiplegia, as before mentioned, a piece of gold leaf having been applied on the right side of the forehead, and another on the arm of the left side, as often as the circuit is completed, the arm becomes convulsively agitated. During the operation, one of the conductors should be left in contact with one of the pieces of metallic leaf, while the other conductor, which is

is employed to complete the circuit, should be removed immediately after the contact is made. The operator should proceed thus for about ten minutes or a quarter of an hour, according to the nature of the case, and the degree of inflammation induced on the parts.

"Very soon after the application of galvanism, an areolous redness is perceived; and if it be persevered in too long, vesications and subsequent ulcerations are produced. These symptoms, which are a little troublesome for the moment, do not require any particular treatment in their cure. The part of the body to which the conducting wire from the copper side of the battery is applied, is always the most powerfully acted on; and if the conducting wires be kept in contact with the metallic leaves, for the space even of half a minute, without being removed, the one from the copper side will produce an acute pricking sensation, very much resembling the bite of a leech.

"In some cases, attention ought to be paid to this difference between the ends of the battery. When it is wished to act on one part of the body more powerfully than on the other, the conducting wire from the copper end should be placed on that particular part. This difference in power corresponds with the effects experienced from the charged Leyden jar, in the case of which, the part of the body connected with the negative side of the jar is more powerfully acted on than the part connected with the positive side. In recent cases of hemiplegia, very good effects are soon perceived. After a few applications, a sensation of returning warmth is felt; and the action of the muscles of the arm restored, as often as the circuit is completed. After the operation, the use of the flesh-brush, persevered in for about a quarter of an hour, contributes to re-establish the circulation of the diseased parts."

Paralytic affections, either general or local, have always been thought peculiarly to demand the trial of electricity, as a powerful stimulus, whose most active operation appears to be upon the nervous system. Galvanism probably stands on the same ground with electricity in this respect, and certainly deserves a trial. The author gives his testimony to its partial efficacy, though in no very high terms. In that species of deafness, which arises from apparent defective energy in the auditory nerves, galvanism seems to have produced very good effects. The author's mode of application is very effectual. It can be properly understood only by consulting the plates. In diseases of the eyes, and incipient amaurosis, which would appear peculiarly fitted for the application of this remedy, no success has been obtained. The following testimony is more favourable:

"In involuntary actions of the muscles, I know of no remedy so efficacious as galvanism. In a contracted state of the fingers, or hands, however violently the latter may be clenched, on the application of this principle for the space of a few minutes, it

rarely

rarely fails to induce a relaxation. In cases of cramp, if of long continuance, and even of tetanus, or locked jaw, it has afforded relief in a short space of time. In contractions of the joints, and in all cases of rigidity, it will be found a very advantageous stimulus, which will greatly contribute to the restoration of motion.

"In the stiffness of the joints, occasioned by the gout, it has come under my observation that the stimulus of galvanism, conjointly with the flesh-brush, has been attended by the happiest effects. It seems to give such a tone to the blood-vessels as to render the circulation more vigorous. In this state of the disease such an effect is very desirable.

"Perhaps, in no case are the advantages of galvanism more sensibly experienced, than in indolent tumours, or scrophulous swellings, which have long remained stationary. By the influence of this principle, tumours of this kind have in a few days been brought either into a state of suppuration or resolution. Many swellings are of such a nature, that their removal by either of these means are desirable. I have frequently applied the galvanic principle with the utmost success in inguinal tumors, which had resisted every other curative intention. The obtuse aching sensation, generally attendant on these indolent tumors, is very speedily removed. In scrophulous affections of the neck, it has been found very beneficial."

In cases of asphyxia, from any cause, galvanism promises to become an agent of infinitely more power in restoring life than any hitherto known. The astonishing experiments of Aldini on mutilated and decapitated animals, exhibit the extreme energy of this principle in restoring all the vital functions; and this, assisted by the judicious expansion of the lungs by inflation, may perhaps, give us a latitude in restoring suspended animation, beyond the most sanguine expectations of the most zealous philanthropist. In this point of view, galvanism certainly merits the most persevering research. The author of the volumes before us has shewn himself equally as well qualified to pursue the science as to impart his knowledge to others. We heartily wish him success in this new and interesting branch of natural philosophy.

Account of Diseases in the Finsbury Dispensary, from January 20, to February 20, 1805.

Ophthalmia	16	Pneumatosis	1
Pneumonia	6	Dyspepsia	12
Catarrhus	10	Diarrhœa	6
Phthisis	8	Morbi Cutanei	10
Asthma	4	Morbi Infantiles	15
Chlorosis	13	Febricula	7
Amenorrhœa	8	Cephalea	1
Menorrhagia	5	Rheumatismus	5
Asthenia	17	Enteritis	1
Anasarca	3		

This

This is the period of the year at which inflammatory complaints are more particularly apt to occur, although at no season do they bear any considerable proportion to that vast mass of maladies with which the present race of mankind are liable to be afflicted.

Diseases have retained their ancient name, whilst they have been altered in their intrinsic character, by a gradual progress of innovation in the fashions, habits, and circumstances, of modern society.

Sydenham was the first physician of his day, and, perhaps, has not been surpassed in reputation or in merit by any previous or subsequent practitioner. But if his mode of treatment were, out of respect to his venerable authority, to be adopted in cases that are now submitted to our professional care, it would prove as deleterious as it formerly was conducive to health and the preservation of existence. It is on this account that that learned lore, on which so many pride themselves, is of little actual service after a man has passed through the elementary stages of a regular medical education. In the productions of classical authors he reads of diseases which he has no opportunity of seeing, and for the cure of which he is never called upon to exercise his science or his skill.

The merely book-taught physician is apt to be misled by the denominations of diseases, with regard to their causes and essential nature. This is, in no instance, better exemplified than in cases of fever. The old-fashioned fevers that were contemporary with Sydenham, and even with Hoffman, were characterized by features of high and active inflammation.

Inflammatory fever, at present, scarcely ever occurs. The febrile affections that now prevail are, in general, marked by an extreme of debility, and every symptom that follows from an exhaustion of the mental and physical energies of the system.

In these latter affections, inordinate and increased action is often conspicuous. The patient not unfrequently exhibits more muscular exertion than would have been accomplished in a condition of health. This, however, is a demonstration not of augmented, but of oppressed power. Extraordinary efforts of this kind are, in general, made during the delirium of typhus, a state in which the depression of strength is particularly remarkable. These fugitive and abrupt exhibitions of morbid energy are very far from indicating the genuine characteristic of strength, which shews itself only in a capacity for re-

gular

gular and continued action. The human machinery is of so complicated a structure, and its motions, although various, are all so connected and dependent upon each other, that its derangement in one part may produce a temporarily increased action in the whole machine, in the same manner as a watch chain, if broken, will run down with increased and inordinate force.

Although general affections of an inflammatory nature so very rarely occur, local and organic diseases of this kind are by no means uncommon. A very obstinate and critical case of pneumonia, or inflammation of the lungs, is, at present, under the care of the Reporter; the symptoms of which he has sensibly relieved by repeated bleedings from the arm. Such a state of constitution requires a considerable degree of delicacy in the treatment of it, as debility is an invariable attendant on this disease. But it ought to be considered, that in such cases, bleeding, so far from diminishing strength, is calculated to increase it, by relieving the oppressed vessels from a load of blood, which is disproportionate to the reduced power of propulsion.

This disease, in an early stage, may be counteracted by appropriate remedies; but when, by neglect, or improper management, it is allowed to acquire the exaggerated and alarming physiognomy of phthisis, the physician then has no more to do than to exercise all his talents, merely to sooth anxiety, and to relieve symptoms, without any idea of eradicating the cause of an hopeless and incurable disorder. " Seulement repandre des fleurs sur les bords de notre tombe, et nous masquer l'horreur de ce passage effrayant."*

J. REID.

Grenville-street, Brunswick-square, March, 25. 1805.

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* Chaptal Annales de Chimie.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

NON-CONTAGIOUSNESS OF YELLOW FEVER.

Neither the Black-vomit, Serum, nor Saliva of Persons labouring under the Yellow Fever, capable of communicating that Disease. — Dr. Ffirth, of Salem, in New-Jersey, has published a dissertation on malignant fever, with an attempt to prove that it is not contagious. In this he relates a number of experiments which he has made upon the matter of black-vomit, as discharged by persons labouring under that disease. These experiments are bold and decisive; and their author deserves the thanks of the civilized world for having made them. They prove that the dark-coloured fluid voided from the stomachs of those who are suffering the latter symptoms of that malady, is wholly innoxious. They agree in the main with the experiments on the same matter which were related in the Med. Repository of New York, vol. iv. p. 163. But this intrepid gentleman has carried them further than those, and, indeed, far beyond the trials of any other person. We recommend them to the careful consideration of the contagionist here and elsewhere.

Dr. Ffirth fed a dog for a week on bread soaked in black-vomit, and on the ejected black-vomit matter itself. He grew fond of his food, and enjoyed very good health. A cat was kept on similar diet for five days. She lapped the black matter with avidity, and had no symptom of disease. Fresh black-vomit was inserted between the skin and muscles of a dog's back, and confined there. The wound healed by the first intention, the fluid was absorbed, and the creature continued healthy after this extraordinary inoculation. Dr. Ffirth then inoculated himself in the left fore-arm with black-vomit just discharged from a moribund patient; a slight inflammation ensued, which subsided in three days, and the wound readily healed. He confined some of the same dark matter, immediately after ejection, over a cut in his right arm, by sticking-plaster, for two days. On examination at the end of that time, there was no more inflammation discoverable than if the black-vomit had not been introduced. The wound readily healed, and without the formation of pus. To avoid cavil and deception, he repeated these experiments above twenty times, on various parts of his body, with the black matter collected in Philadelphia during the seasons of 1802 and 1803. He put it into his eye without experiencing more inconvenience than cold water produces. He exposed himself to the exhalations of it, while acted upon by heat in an iron skillet, and

and experienced no unpleasant sensation. He swallowed the thick extractive matter, which remained after evaporation, in the form of pills, without incommoding his stomach. He even went so far as to mix half an ounce of fresh black-vomit with an ounce and a half of water and to drink it. It produced no more effect on his stomach than so much water. He increased the dose to two ounces; and finally swallowed the black-vomit in like quantity, without any dilution at all, and without sustaining the least injury. He inoculated himself with saliva and serum with as little inconvenience!

The following Annual Report of a National Institution in Ireland for the Extermination of the Small-Pox, was transmitted to the Editors by Dr. WALKER, of Salisbury Square.

"On the Business of the Royal Jennerian Society,
"The Secretary,
"14, Salisbury Square.

"Sir,

"I am directed to transmit to you the enclosed Report of our Institution, the copy of an advertisement, &c. and to request that you may forward to us whatever papers you may have published upon the subject of cow-pock.

"I am, &c.

Feb. 26, 1805. "S. B. LABATT.

COW-POCK INSTITUTION,

NORTH COPE STREET, DUBLIN,

Under the Patronage of His Excellency Earl Hardwicke, &c. &c.

Opened on January 14, 1804, under the superintendance of the undersigned physicians and surgeons of this city, for the purposes of securing a succession of cow-pock matter, of inoculating gratuitously the children of the poor; and of supplying the different parts of the kingdom with genuine infection.

Physicians.	*Surgeons.*
JOSEPH CLARKE,	GEORGE STEWART,
JAMES CLEGHORN,	RALPH S. OBRE,
THOMAS EVORY.	SOLOMON RICHARDS.

An Abstract from the Register of Inoculations and Distribution of Matter:

Patients inoculated during the last year - - -	578
Packets of infection issued to practitioners in general	776
Packets of infection issued to army surgeons - -	236

In the above five hundred and seventy-eight cases the cow-pock observed its characteristic mildness, not proving fatal in a single instance, nor even inducing a severe disease.

In

In two cases, convulsions appeared on the eighth day, but they were evidently produced by costiveness, on the removal of which the fits subsided.

In a few patients the inoculated part (from being irritated) ran on to ulceration, which however was soon relieved.—An ointment composed of one part of ung. hyd. nit. and two of ung. simp. was found most useful in such cases.

No instance occurred of eruptions over the body.—In two cases the children, by scratching the inoculated parts, conveyed the virus to the under eye-lid, where an adventitious vesicle was thus excited, producing much pain and intolerance of light, which however soon disappeared.

Constitutional symptoms were seldom observed; when such did occur, they were but slight and transient.

Delicate children, and those affected with cutaneous eruptions, (particularly with itch) were found more difficult to be infected with cow-pock than others.

No consequent disease has been observed imputable to cow-pock.

No case occurred to excite the smallest doubt as to the *permanent* efficacy of cow-pock, in protecting the system against the small-pox; neither in this institution, nor in the private practice of any of the gentlemen who superintend it.

Strict attention has been paid to investigate several cases of reputed failure of cow-pock, in preventing small-pox, in this city and its neighbourhood, all of which proved, on minute enquiry, to be the effects of ignorance or misrepresentation.

The increasing applications for cow-pock matter, from the country parts of this kingdom, evince that the new inoculation is gaining ground rapidly, and sanguine hopes are entertained that it will soon become as generally practised in Ireland as in Great Britain.

Signed by order,

S. B. Labatt, M. D. Secretary.

Dublin, Jan. 15, 1805.

Mr. Goldson's pamphlet having tended to raise fresh doubts in the minds of the already prejudiced against vaccination in this country, it was thought expedient to send several copies of this paper to every county town in Ireland.

Cow-Pock Institution, North Cope Street, Dublin.

An opinion having been lately circulated, that cow-pock inoculation ceases, at the expiration of three years, to secure the constitution against the action of small-pox, we think it our duty to inform the public, that all the trials we have hitherto made conspire to prove this opinion erroneous.—In the cases which gave rise to it, we believe there must have been inaccuracy in the choice of the infection employed.

By the most moderate computation, it appears that the number of deaths from small-pox in Great Britain and Ireland still amounts

amounts to between *thirty and forty thousand* annually; a practice which bids fair to put a stop to the ravages of so destructive a disease, we think well entitled to a patient and unprejudiced investigation:—Having no object in view but truth and utility, the public may rest assured, should any thing really adverse to cow-pock inoculation occur to us, we shall be among the first to give notice of it.

JOSEPH CLARKE, GEORGE STEWART,
JAMES CLEGHORN, RALPH OBRE,
THOMAS EVORY, SOLOMON RICHARDS.
Signed by Order,
June 26, 1805. S. B. LABATT, Secretary.

HOWEVER trifling it may appear in the eye of philosophy to mark the coincidence, yet a Correspondent seems anxious to have it noticed, that the 19th of January, 1803, which gave birth to the Royal Jennerian Society in London, was the day on which the Right Hon. the Governor in Council at Madras, was pleased in an Advertisement to announce to the native inhabitants the important advantages to be derived from vaccination, and the encouragement which his Lordship in Council proposed to afford for the extension of so signal a blessing throughout the territories under the Presidency of Fort St. George.

It is our pride to have contributed to the formation of that society, whose services to the world are so honourably recognised by the governors there, as well as by the government at home; more particularly, the War Office and His Majesty's Post Masters General, continue to afford to it a patronage truly liberal.

The Reports we have published from India make the numbers amount to more than 150,000 already protected by the discovery of Jenner.

In the following extracts from some late communications from Dr. Anderson, (through the medium of Dr. Walker) we are happy to find that his zeal remains undiminished, we also obtain from them information both interesting and curious under different points of view; among other pleasing circumstances, let our constant correspondent the indefatigable Mr. Ring, derive an unmixed gratification from learning that his writings, together with those of the Society in which he incessantly labours, receive the *imprimantur* of the Physician General at Madras.

" *To the Editor of the Government Gazette.*

" Sir,

" As the inoculation of cow-pock has surmounted all opposition over the whole of Europe, and the attempts to introduce it here have been attended with reasonable success; there can be but little doubt, that a steady attention to the practice may be productive of the extirpation of small-pox, and such persons as are restrained by the fear of offending Mare Ummœ, the goddess of small-pox in this country, will in due time acquiesce in the use of cow-pock inoculation,

inoculation, as well as those who entertained the notion of diseases being a dispensation of Divine Providence in that; all of whom will now thankfully acknowledge a beneficent Deity, permitting human capacity to discover and estimate laws of nature, or second causes, for the welfare of society.

"You will therefore be so good as insert this letter in your Weekly Paper, together with the accompanying table, extracted from p. 1036 of Mr. Ring's History of Vaccine Inoculation, as a compendious calculation of the advantages that will attend the extirpation of small-pox; besides the pleasing gratification of preserving the human race from a dire disease, it may be worthy of remark, that every life here, as a source of revenue to government, may be valued at eight shillings sterling a year; so that, saving the lives of the inhabitants of this country, appears no less an object well meriting every effort, whether it is considered in a philanthropic or pecuniary point of view.

"As it is possible on the extended scale which it is to be hoped vaccination may now come into practice, that many operations may be performed without a proper effect; I have subjoined the signs of infection and description of the vaccine vesicle, as laid down by the Jennerian Society, whereby your readers may be enabled to judge by inspection and examination on the days specified, whether the disease is genuine or not, excepting that in some of the darker complexioned Asiatics, the areola is not so obvious to the eye, as in European patients, on account of the different opacity of the rete mucosum of the skin; but the hand applied to the circumference of the vesicle, readily discovers the firm hardness of the areola in them as well as in Europeans.

"I am, Sir,

"Your obedient and very humble Servant,

"JAMES ANDERSON, Physician Gen."

Fort St. George, Aug. 29, 1804.

"*To the Editor of the Government Gazette.*

"Sir,

"The intellectual powers of the Indians being guided by ancient tradition, appear to advantage in their adoption of cow-pock inoculation; and every remarkable instance of it, as tending to promote the extermination of small-pox, is worthy of notice.

"The Raja of Chintapilly nobly submitted to small-pox inoculation, and His Excellency the Raja of Tanjore has already displayed distinguished countenance in favor of cow-pock inoculation; but it seems to have been reserved for the Dewan of Travancore to submit his own person to so great a novelty.

"Progress towards the extermination of small-pox is become so promising, that I have little doubt, the cow-pock lancet will soon be as familiar to the Hindoos, as the plough or the shuttle.

"The following extract of a letter from Mr. Henry Robertson, Surgeon

Surgeon at Angengo, under date the 3d instant, will therefore prove acceptable intelligence to your readers.

"I beg to assure you, that I shall continue to promote Vac-"cination by every means in my power—those who have hitherto "submitted to it in this part of the country, have been chiefly "Christians and Hindoos of low cast; but the period is fast ap-"proaching when I trust every inhabitant of Travancore, from "the highest to the lowest, will lay aside all prejudice, and by "becoming proselytes to the Jennerian system, will cheerfully "suffer themselves to be inoculated—there is every reason to "hope, that this desirable object may be attained, so far at least "as the powerful influence of example will tend to that effect, "as the Dawan was vaccinated by Mr. Macauley, at Allepi, "upon the 30th ultimo."

I am, &c.

JAMES ANDERSON, Physician General.

Fort St. George, Sept. 12, 1804.

Six of the most eminent physicians in France, Chaussier, Leclerc, Baily, Husson, Nysten, and Hamel, have been sent to Spain, to inquire into the nature of the epidemical disease, which has raged with such violence in that country, and to endeavour to find out the most effectual remedy for preventives against it. The king of Prussia has likewise sent thither, for the same purpose, Prof. Reich, of Erlangen.

The Icelandic moss, which has lately been discovered in Spain, has likewise been found in the district of Concossola, in the Italian republic.

The society for the encouragement of arts have lately voted their gold medal to Dr. Howison for his preparation of tan made in the East Indies from the bark of the mangrove tree.

Mr. Young, surgeon, of North Audley Street, will publish early in May, an important work on the subject of Cancer, entitled *Sanaschirrologia;* containing an analytical inquiry into the nature and action of Schirrus, in order to establish a regular mode of curing that disease in its various stages, by means of natural separation.

Mr. ROGERS has just published a work, entitled, "An Examination of that Part of the Evidence relative to Cow-pox, which was delivered to a Committee of the House of Commons by two of the Surgeons of St. Thomas's Hospital: With Remarks on the inoculated Small-pox."

The Papers of Mr. Clement, Mr. Dunning, and Chirurgicus, intended to have been inserted in this month's Journal, are unavoidably deferred till our next.

A Meteorological Table, by Dr. Higgins, *of Brompton.*
From February 22, to March 22, 1805.

Days of the Month.	Thermometer Fahrenheit. 8 o'Clock Morning.	Noon.	10 o'Clock Night.	Centegrade Noon.	Height of the Barometer. Inches. 8 o'Clock Morning.	Noon.	10 o'Clock Night.	Deg. of Evaporation by the Hygrometer.	WEATHER.
Feb. 22	46°	48°	37°	8.88	30.00	30.00	30.06	30°	Cloudy.
23	42	49	42	9.94	.34	.47	.53	36	Fair, rain in the night.
24	47	48	40	8.88	.33	.11	.01	16	Rain, fair in the evening.
25	44	49	44	9.94	.10	.13	.13	30	Fair.
26	47	51	42	10.55	.12	.14	.15	24	Showery.
27	45	51	46	10.55	.01	.00	29.80	15	Cloudy, rain in the evening.
28	47	49	34	9.44	29.79	29.72	.65	26	Rain and hail ſhowers
March 1	42	47	35	8.33	.69	.84	.96	30	Windy, hail ſhowers, & ſnow in night.
2	39	45	32	7.22	30.28	30.37	30.51	25	Cloudy, with light ſhowers
3	40	49	42	9.44	.62	.64	.60	32	Cloudy, rain in the night.
4	49	55	44	12.77	.50	.45	.33	24	Cloudy with wind.
5	48	52	44	11.11	.26	.28	.36	28	Fair.
6	48	50	40	10 00	.38	.40	.48	26	Cloudy.
7	35	38	34	3.33	.77	.79	.71	30	Fair.
8	37	44	32	6.66	.56	.50	.28	28	Fair.
9	34	36	30	2.22	.12	.02	29.94	24	Cloudy.
10	33	41	30	5.00	29.92	29.92	30.06	26	Fair.
11	35	42	42	5.55	30.27	30.34	.35	40	Fair.
12	50	59	50	15.0?	.35	.35	.38	34	Fair.
13	58	61	50	16.11	.40	.37	.29	72	Fair.
14	56	60	48	15.55	.09	.01	29.92	54	Fair, cloudy in the evening.
15	51	52	38	11.11	.03	.11	30.26	40	Cloudy.
16	50	56	46	13.33	.31	.36	.25	36	Fair.
17	51	55	42	13.88	.19	.13	.06	42	Fair.
18	44	49	40	9 44	.22	.28	.46	20	Small rain.
19	43	50	41	10.00	.63	.62	.65	48	Fair, rain in the night.
20	40	42	38	5.55	.58	.56	.56	22	Rain.
21	41	43	40	6.11	.56	.49	.42	28	Cloudy.
22	44	46	40	7.77	.36	.32	.32	32	Windy.

ADDENDA.

Case of Malformation of the Heart, by Mr. Ring, vide p. 120.

EXPLANATION OF THE PLATE.

Anterior View.

a. The superior cava
b. The aorta
c. The right auricle
d. The opening of the pulmonary artery
*e.** The opening of the aorta
f. The opening of the right auricle
g. The right ventricle
h. The pulmonary artery
i. The left aurcle
k. The opening of the aorta
l. The opening of the left auricle
m. The left ventricle

Posterior View.

*n.** The superior cava
o The pulmonary artery
p. The aorta
*q.** The inferior cava
r. The left auricle
s. The left ventricle
t. The superior cava
u. The right auricle
v. The right ventricle

Those marked with a * are deviations from the natural structure; *d. e. f. k.* and *l.* refer to the foramina, opposite to which they are placed.

Pulmonary Ossifications.

Scirrhus Testicle.

Printed for Richard Phillips, 6, New Bridge St. 1805.